

Marc P. Berger
Regional Director
Lara S. Mehraban
Jack Kaufman
Attorneys for Plaintiff
SECURITIES AND EXCHANGE COMMISSION
New York Regional Office
Brookfield Place
200 Vesey Street, Suite 400
New York, NY 10281
(212) 336-0106 (Kaufman)
Email: Kaufmanja@sec.gov (Kaufman)

**UNITED STATES DISTRICT COURT
DISTRICT OF NEW JERSEY**

| | |
|-------------------------------------|---|
| -----X | |
| SECURITIES AND EXCHANGE COMMISSION, | : |
| | : |
| Plaintiff, | : |
| | : |
| - against - | : |
| | : |
| JOSEPH TAUB, ELAZAR SHMALO, and | : |
| SHAUN GREENWALD, | : |
| | : |
| Defendants. | : |
| | : |
| -----X | |

16 Civ. 09130 (JMV) (JBC)
FIRST AMENDED
COMPLAINT
ECF CASE

Plaintiff Securities and Exchange Commission (“Commission”), for its Complaint against Defendants Joseph Taub (“Taub”) (who, upon information and belief, resides at 65 Edgewood Avenue, Clifton, NJ 07012), Elazar Shmallo (“Shmallo”) (who, upon information and belief, resides at 93 The Circle, Passaic, NJ 07055), and Shaun Greenwald (“Greenwald”) (who, upon information and belief, resides at 814 King Street, Woodmere, NY 11598) (collectively, “Defendants”), alleges:

SUMMARY

1. From at least January 2014 through December 9, 2016, Defendants engaged in a lucrative fraudulent market manipulation scheme, utilizing dozens of securities accounts at several brokerage firms to artificially influence the market prices of more than 2,500 exchange-traded securities. The design and intent of Defendants' scheme was to create the false appearance of trading interest and activity in particular stocks, thereby enabling them to purchase stocks at artificially low prices and then quickly sell them at artificially high prices for substantial profits.

2. Defendants successfully attained their illicit goals. In the three-year period between January 2014 and December 2016, Defendants Taub and Shmalo engaged in a total of at least 30,000 such market manipulation events (hereinafter referred to as "Coordinated Trading Events") and reaped approximately \$40 million in illicit profits. The Coordinated Trading Events typically occurred in less than 5 minutes each, and Defendants Taub and Shmalo averaged approximately 40 such events per trading day.

3. Defendants Taub and Shmalo used at least two accounts to accomplish each Coordinated Trading Event. At least one account was primarily used to place multiple small orders in a stock to create upward or downward pressure on the stock price (hereinafter referred to as a "helper" account). At least one other account (hereinafter referred to as a "winner" account) was primarily used to purchase and sell larger quantities of stocks at prices that had been affected by the manipulative orders in the helper account. To further conceal their scheme, the helper and winner accounts that Defendants Taub and Shmalo used in each Coordinated Trading Event were almost always held at different clearing firms to mask the illicit coordination between the two types of accounts. Defendant Greenwald actively participated in the scheme,

including by opening accounts in his own name and the names of entities that he set up, and by concealing from brokerage firms that Taub was trading in such accounts. Greenwald did this in exchange for a portion of the profits derived from Taub's manipulative trading.

4. In addition to the manipulative trading itself, Defendants engaged in other deceptive conduct designed to evade detection, including misrepresenting to brokerage firms the identities of traders in accounts and the nature of their trading (which involved simultaneous trading in accounts at other firms).

5. By virtue of the foregoing conduct and as alleged further herein, Defendants violated, and aided and abetted each other's violations of, Sections 17(a)(1) and 17(a)(3) of the Securities Act of 1933 ("Securities Act"), 15 U.S.C. §§ 77q(a)(1), (3), and Section 10(b) of the Securities Exchange Act of 1934 ("Exchange Act") and Rules 10b-5(a) and 10b-5(c) thereunder, 15 U.S.C §§ 78i(a)(2), 78j(b), 17 C.F.R. §§ 240.10b-5(a), (c). In addition, Defendants Taub and Shmalo violated, and aided and abetted each other's violations of, Section 9(a)(2) of the Exchange Act, and Defendant Greenwald aided and abetted Taub's and Shmalo's violations of Section 9(a)(2) of the Exchange Act.

NATURE OF THE PROCEEDING AND RELIEF SOUGHT

6. The Commission brings this action pursuant to the authority conferred upon it by Sections 15(b), 20(b) and 20(d) of the Securities Act. 15 U.S.C. §§ 77o(b), 77t(b), 77t(d), and Sections 20(a), 20(b), 20(e), 21(d)(1), 21(d)(3), and 21 (d)(5) of the Exchange Act, 15 U.S.C. §§ 78t(a), 78t(b), 78t(e), 78u(d)(1), 78u(d)(3), 78u(d)(5). The Commission seeks a final judgment: (a) permanently restraining and enjoining Defendants from engaging in the acts, practices and courses of business alleged herein; (b) requiring Defendants to disgorge all ill-gotten gains with prejudgment interest thereon; and (c) ordering Defendants to pay civil money

penalties pursuant to Section 20(d) of the Securities Act, 15 U.S.C. § 77t(d), and Section 21(d)(3) of the Exchange Act, 15 U.S.C. § 78u(d)(3).

JURISDICTION AND VENUE

7. The Court has jurisdiction over this action pursuant to Sections 20(b) and 22 of the Securities Act, 15 U.S.C. §§ 77t(b) and 77v, and Sections 21(d) and 27 of the Exchange Act, 15 U.S.C. §§ 78u(d) and 78aa. Defendants, directly or indirectly, made use of the means or instruments of transportation or communication in interstate commerce, or of the mails, or of a facility of a national securities exchange in connection with the transactions, acts, practices and courses of business alleged herein.

8. Venue lies in this District pursuant to Section 22(a) of the Securities Act, 15 U.S.C. § 77v(a), and Section 27 of the Exchange Act, 15 U.S.C. § 78aa, because certain of the acts, practices, courses of business and transactions constituting the violations alleged herein occurred within the District of New Jersey. Certain of the trade orders were placed in New Jersey, and telephone calls were made from New Jersey and to others in New Jersey. Orders used to perpetrate the scheme were placed and executed on exchanges that had data centers located in the District of New Jersey. Much of the conduct alleged herein occurred while Defendants Taub and Shmalo resided in New Jersey. Defendants exchanged e-mails and text messages while Defendants Taub and Shmalo were located in New Jersey.

DEFENDANTS

9. **Taub**, age 38, is a resident of Clifton, NJ. From approximately November 2002 until May 2011, Taub was a registered representative at various brokerage firms (where he held Series 7 and 55 licenses).

10. **Shmalo**, age 22, is a resident of Passaic, NJ. On brokerage account opening documents, Shmalo describes himself as either “self-employed” or “unemployed.”

11. **Greenwald**, age 40, is a resident of Woodmere, NY and is a certified public accountant licensed in New York.

RELATED ENTITIES

12. **EAC Capital LLC (“EAC”)** is a New York limited liability company with addresses in Cedarhurst, NY and Clifton, NJ. At all relevant times, Taub was a beneficial owner of EAC, and he controlled trading in the brokerage accounts in EAC’s name that were used in the scheme alleged herein. Greenwald was also a beneficial owner of EAC.

13. **LNW Direct LLC (“LNW”)** is a New York limited liability company with addresses in Cedarhurst, NY and Clifton, NJ (the same addresses as EAC). At all relevant times, Taub had a beneficial ownership interest in LNW, and he controlled trading in the brokerage accounts in LNW’s name that were used in the scheme alleged herein. Greenwald was also a beneficial owner of LNW.

FACTS

A. Defendants Engaged in a Voluminous Manipulative Trading Scheme.

14. From at least January 2014 to December 9, 2016, Defendants Taub and Shmalo orchestrated voluminous intentionally manipulative trading in stocks traded on U.S. securities exchanges, including the NASDAQ Stock Market (“NASDAQ”), the New York Stock Exchange (“NYSE”) and the NYSE MKT. In the three-year period between January 2014 and December 2016, Defendants Taub and Shmalo engaged in coordinated stock trading in at least 73 accounts that they controlled at 12 separate brokerage firms (the “Coordinated Accounts”).

15. Defendant Taub was the principal orchestrator of the manipulative scheme. Taub traded in the Coordinated Accounts in his name, as well as in the names of his associates (who

Taub compensated for the use of their brokerage accounts), regardless of whether Taub was designated as an authorized trader in those accounts. Taub instructed Defendant Shmalo as to how to execute the manipulative tactics and supervised Shmalo's trading. Taub also provided most or all of the funds for the securities accounts that Defendants used in the manipulative trading scheme, and Taub received the majority of profits derived from the scheme.

16. Defendant Shmalo traded securities in Coordinated Accounts held in his name, his and his relative's name, and the names of Taub's associates (who Taub compensated for the use of their brokerage accounts), regardless of whether Shmalo was designated as an authorized trader in those accounts. Defendant Taub provided most or all of the funds for such accounts. Taub initially provided approximately \$330,000 to fund such accounts, to be used by Shmalo to trade under Taub's supervision, with the expectation that Shmalo would return the funds to and share the net profits with Taub. Shmalo regularly reported his trading to Taub, including providing him position reports and profit-and-loss calculations. Shmalo generally received 30 to 35 percent of the net profits in the Coordinated Accounts in which he traded, with Defendant Taub receiving the remainder.

17. Defendant Greenwald actively participated in the scheme and was primarily responsible for orchestrating deceptive organizational and accounting activities necessary for the scheme. Greenwald knew that Taub would not be permitted by certain brokerage firms to be an authorized trader on accounts. Greenwald took steps to actively conceal from these brokerage firms that Taub was placing trades in accounts for which Taub was not an authorized trader. For example, Greenwald arranged the corporate structures of EAC and LNW and prepared account opening documents for many of the Coordinated Accounts used in the scheme, several of which misrepresent beneficial ownership and authorized traders. Greenwald also opened certain of the

Coordinated Accounts in his own name, as well as an account in EAC's name, so that Taub could trade in them without his being named as an authorized trader. With knowledge of the fraudulent scheme, Greenwald ceded control to Taub to trade in such accounts and engaged in other facilitating activities. Greenwald also oversaw the finances of the manipulative trading scheme, moving money between accounts and calculating profits, losses, expenses and tax liabilities for Taub and Shmalo in connection with their manipulative trading. Greenwald received at least 8 percent of the profits from Taub's trading in accounts held in Greenwald's name.

18. Defendants repeatedly opened accounts to carry out the scheme, in which Defendants Taub and Shmalo engaged in the following general trading pattern in Coordinated Trading Events:

- a. Defendants Taub and Shmalo used two or more Coordinated Accounts to trade on the same day during the same period of time in the same exchange-traded stock, typically a relatively thinly-traded stock;
- b. The trading event began when the first Coordinated Account traded and ended when Defendants Taub and Shmalo closed out their positions in the particular stock that they were trading (or when the trading day ended, whichever occurred sooner);
- c. In one (or more) helper account(s), Defendants Taub and Shmalo primarily placed multiple smaller buy (or sell) orders to create the upward (or downward) pressure on the stock price; and
- d. In at least one other winner account, Defendants Taub and Shmalo primarily placed larger buy (or sell) orders executed at artificial prices affected by the "helper" account activities.

19. As a general matter, Defendant Taub's and Defendant Shmalo's manipulative trading—*i.e.*, Defendant Taub's and Defendant Shmalo's trading designed to affect artificially the price of a stock traded in a particular Coordinated Trading Event—occurred in the "helper"

accounts; and Defendants Taub and Shmalo used the “winner” accounts to generate the profits of their manipulative scheme.

20. From in or about early 2014 through in or about late 2016, Defendants Taub and Shmalo engaged in Coordinated Trading Events at least 30,000 times and were successful in generating net profits in approximately 80 percent of those Coordinated Trading Events. The average profit realized for each profitable Coordinated Trading Event was approximately \$1,650. Defendants reaped a total of approximately \$40 million in profits from their successful Coordinated Trading Events. For the 20 percent of the time that a Coordinated Trading Event resulted in a net loss, the average net loss per event was approximately \$850.

21. In some Coordinated Trading Events, Defendants Taub and Shmalo started the event by purchasing one large lot of shares in the winner account. In other Coordinated Trading Events, Defendants Taub and Shmalo created an artificially lower market price for a stock by placing multiple small sell orders (typically 100 to 400 shares each) in one or more helper accounts. The purpose and effect of entering multiple small sell orders in the helper account was to create for the market the false appearance of significant sell-interest in the security, and to induce other market participants to execute against buy orders that Defendants Taub and Shmalo entered in a winner account at artificially low prices (typically through a rapid succession of buy orders of between 1,000 to 4,000 shares each). Once the winner account buy orders were executed, Defendants Taub and Shmalo then typically cancelled any open helper account sell orders in order to facilitate the next step in the scheme.

22. After establishing the position in the winner account, the same manipulation was typically repeated on the opposite side of the market to realize the profit from the scheme. To sell the winner account stock at an artificially high price (and, thus, profit from the scheme),

Defendants Taub and Shmalo typically first placed a series of smaller buy orders (of 100 to 400 shares each) in one or more helper accounts, at progressively higher prices. The purpose and effect of those buy orders was to create the false appearance for the market of significant buy-interest in the security, and to induce other market participants to execute against sell orders that Defendants Taub and Shmalo entered in the winner account at artificially high prices (typically through a rapid succession of sell orders of between 1,000 to 4,000 shares each). Once the winner account liquidated its long position (typically generating a net profit for the winner account), Defendants Taub and Shmalo typically cancelled any remaining open helper account buy orders and liquidated any remaining smaller position in the helper accounts (thus frequently accruing losses that were smaller than the winner account's gains).

23. Defendants Taub and Shmalo typically used only two accounts for the majority of the Coordinated Trading Events, although they used three or more accounts for approximately 11,000 (or 37%) of the Coordinated Trading Events.

24. Through their thousands of Coordinated Trading Events, Defendants Taub and Shmalo intended to induce other market participants to sell shares to and purchase shares from their winner accounts at artificially-created prices driven by their helper account orders.

25. Defendants Taub, Shmalo, and Greenwald each understood the mechanics of the Coordinated Trading Events. In particular, Defendants understood that the events involved coordinating trading among the helper and winner accounts, in which the helper accounts almost always accrued small losses solely for the purpose of attempting to artificially lower the price at which the winner accounts were able to purchase stock and/or raising the price at which the winner accounts were able to sell stock. Each Defendant understood that such losses were a necessary component of their manipulation scheme, a fact reflected in the manner in which

Defendants discussed and calculated their profits and losses, and distributed them amongst themselves and other associates.

26. Attached hereto as Exhibits 1-7 are seven detailed examples of individual Coordinated Trading Events, which the Commission incorporates by reference herein as Commission allegations in this paragraph of the Complaint. Each of those Coordinated Trading Events took place in less than six minutes. The net profits that Defendants reaped from the seven attached examples range from \$901 in two minutes (Exhibit 5) to \$21,162 in under four minutes (Exhibit 3). Defendant Taub's and Defendant Shmallo's share of the trading volume in the particular stocks traded during the time periods of these seven Coordinated Trading Events ranges from approximately 57% (Exhibit 2) to approximately 87% (Exhibit 3).

27. Exhibits 1-7 are examples of Coordinated Trading Events that Defendants Taub and Shmallo engaged in at least 30,000 times in the three-year period between January 2014 and December 2016.

B. Defendants' Elaborate Efforts to Conceal Their Fraudulent Scheme.

28. To perpetuate their scheme, the Defendants undertook elaborate measures to evade detection. For each Coordinated Trading Event, Defendants Taub and Shmallo used at least two accounts—a helper account and a winner account—which were almost always held at two different clearing firms, to mask the illicit coordination between the two (or more) accounts.

29. To further conceal their activity, Defendants opened and used a total of at least 73 Coordinated Accounts in the scheme. The 73 Coordinated Accounts were held in Defendants' own names, the names of their family members (including minor children, spouses and parents), the names of entities that Defendants controlled, such as EAC and LNW, and the names of several associates or their spouses as well as entities that such associates purportedly owned.

30. Twenty-seven of the accounts were held in Taub's name or the names of his family members.

31. Taub also traded in multiple accounts in the name of other individuals and entities. For most of these accounts, Taub was not an authorized trader.

32. Taub traded in three accounts held in EAC's name (for which Taub was an authorized trader on only two, and Greenwald was authorized on the third account) and two accounts held in LNW's name (for which Taub was an authorized trader on only one, and Greenwald and Associate A were named as authorized traders on the other).

33. Taub also traded in five accounts held in the name of Greenwald (for which Taub was not an authorized trader). Greenwald concealed Taub's trading in these accounts from the brokerage firms. For example, on April 6, 2016, Greenwald texted Taub concerning one such account that Taub was trading in:

Just fyi I spoke to the local [brokerage firm] guy here bc they kept calling. He said the main branch wanted to know my experience, how I trade, he was amazed at the performance etc...I was cool...also same guy keeps calling about [Associate A's] account but there's nothing going on yet. Just so you know if you have to be cautious. (ellipses in original).

Taub and Greenwald agreed that Taub would share with Greenwald at least 8 percent of the net profits from trading in the accounts for which Greenwald was an authorized trader.

34. Taub also traded in three accounts held in the name of Associate A and in one account held in the name of Associate A's spouse. Taub was not an authorized trader on any of those accounts. Greenwald provided Taub the login credentials and security-question answers for the account held in the name of Associate A's spouse, so that Taub could access and trade in that account. Taub and Associate A agreed that Taub would share with Associate A a portion of

the net profits from Taub's trading in the accounts for which Associate A or Associate A's spouse were authorized traders.

35. Taub also traded in seven accounts held in the name of a limited liability company purportedly owned and controlled by Associate B and four accounts held in the name of a second limited liability company for which Associate C was listed as the sole member in account opening documents and an operating agreement. Taub was not an authorized trader for any of these accounts. Taub and Associate B agreed that Taub would share with Associate B and Associate C a portion of the net profits from Taub's trading in the accounts for which Associate B or Associate C were an authorized trader. In addition to using login credentials that Associate B provided directly to him, Taub was able secretly to access accounts for which he was not an authorized trader by using a remote link on his computer, which linked Taub to a remote computer that contained the necessary login credentials (provided by Associate B). Because the Internet Protocol (IP) address for the remote computer was different from that of Taub's computer, Taub was able to conceal his trading in those Coordinated Accounts. To further conceal his control of the Associate B Coordinated Accounts, Taub on several occasions had Associate B pose questions to the brokerage firms for those accounts, and Associate B then relayed to Taub the responses he received from the brokerage firms.

36. Taub also traded in one account held in the name of Associate D, one account held in the name of a limited liability company purportedly owned and controlled by Associate D, and one account held in the name of Associate D's brother. Taub was not an authorized trader for any of these accounts. Taub and Associate D agreed that Taub would share with Associate D and his brother a portion of the net profits from trading in the accounts for which Associate D or his brother were authorized traders.

37. Nine of the securities accounts used in Defendants' scheme were held in Shmalo's name, and one was held in the name of Shmalo and his family member.

38. Shmalo traded in one account held in the name of Associate D, and three accounts held in the name of Associate D's brother. Shmalo was not an authorized trader for any of these accounts.

39. Shmalo also traded in three accounts held in the name of Associate E (for which Shmalo was not an authorized trader). Taub and Associate E agreed that Taub would share with Associate E a portion of the net profits from trading in the accounts for which Associate E was an authorized trader.

40. Shmalo also traded in one account held in the name of Associate F's spouse. Taub provided the login credentials to Shmalo so that he could trade in that account, and neither Taub nor Shmalo were authorized traders for that account.

41. Both Taub and Shmalo used virtual private networks (VPNs) to mask their IP address and location, to avoid detection by brokerage firms when they traded in the Coordinated Accounts. Taub instructed associates who were authorized traders for Coordinated Accounts to tell brokerage firms that the associates were using VPNs for security purposes, when in fact Taub was using VPNs to mask his trading in the Coordinated Accounts. For example, on January 31, 2016, Taub texted Associate D, "FYI [brokerage firm] account again asking for security questions . . . I'm assuming cause I'm logging in using VPN. U should try and get this cleared up." (ellipses in original). When Associate D then asked what reason he should give the brokerage firm for the use of a VPN, Taub told Associate D, "Yea say u travel and to protect yourself u use VPN." Similarly, when Associate E informed Taub on June 20, 2016 that a brokerage firm had frozen one of the Coordinated Accounts because someone was trying to log

into the account from a server in Miami, Taub responded, “It’s a VPN. Tell them for security reasons your [sic] using a VPN. And it’s your doing.”

42. Furthermore, on the numerous occasions when brokerage firms decided to close certain of the Coordinated Accounts, often driven by compliance concerns, Defendants opened new Coordinated Accounts at other brokerage firms—or in a family member’s name at the same firm—in an attempt to deceive the brokerage firms regarding their control and use of the Coordinated Accounts. For example, in late September 2014, a brokerage firm closed at least 6 Coordinated Accounts that Taub controlled – which, from January to September 2014, had amassed profits of approximately \$9.9 million from Coordinated Trading Events. In January 2015, Shmalo opened an account in his name at the same brokerage firm and by March 2015 (when the firm terminated and closed that account), had amassed approximately \$328,000 in profits from Coordinated Trading Events.

43. Defendant Taub also actively concealed from brokerage firms that he was behind the trading in accounts for which he was not an authorized trader, such as in accounts in the name of Greenwald, EAC, and LNW. Moreover, for certain of the EAC and LNW accounts, Taub’s beneficial ownership interest in such entities was also concealed from the brokerage firms. In certain instances, Taub did so knowing that the brokerage firm would not permit the account to remain open if Taub was an authorized trader and/or a beneficial owner.

44. Despite their concealment efforts, Defendants repeatedly received compliance inquiries from their brokerage firms concerning potentially manipulative trades in their accounts (such as possible wash trades, spoofing, and/or layering). These inquiries often explained practices constituting manipulative trading, such as trading to create or induce a false, misleading, or artificial appearance of activity in a security, or trading to unduly or improperly

influence the market price of a security. To evade their brokerage firms and conceal their coordinated trading, Defendants responded to these inquiries by feigning ignorance and claiming falsely that they would not repeat such activities.

45. For example, a compliance analyst at a brokerage firm emailed Shmalo on February 24, 2015 and explained:

Your activity . . . appeared on one of our Exception reports. . . .
[C]reating a new inside bid or offer, using different Market Centers at the same price level, higher or lower and then mass cancelling these orders . . . and then walking up the bid to a higher level and then trying to sell at this artificially higher level . . . is not permitted under any circumstances. . . .
This is your first and only warning! Your account will be closed if any more instances of this method of trading is discovered!

46. Shmalo replied to the inquiry stating “I am very sorry about these occurrences. It was not my intention nor my knowledge that this activity would be interpreted or considered to be layering. I’ll make sure and be more careful that it doesn’t happen again.” Two days later, Shmalo wrote again in response to the inquiry, asking “. . .[i]f I take the offer and then want to sell, do I have to wait?” In response, the brokerage firm representative reiterated “. . .what you must avoid is entering numerous orders on one side making a new inside NBBO [national best bid and offer] on various exchanges to create the false appearance of demand on one side in order to execute at the artificially inflated price on the opposite side of the market. . . You can’t trade in a manner that could appear to be manipulative.”

47. Greenwald also directly participated in measures to evade detection. For example, Greenwald signed the December 2014 account opening forms for a Coordinated Account in EAC’s name. Those forms identify Greenwald and one of Taub’s family members as “registered and/or authorized agents” for EAC, but do not identify Taub in any respect. Upon the account opening, Greenwald provided to Taub the login credentials for the account. Taub

then sent multiple questions about the account to Greenwald, which Greenwald emailed almost verbatim to the brokerage firm, without copying Taub or otherwise indicating to the brokerage firm that Taub was associated in any way with the account. Greenwald then forwarded the brokerage firm's responses to Taub.

48. Greenwald also forwarded brokerage firm inquiries to Taub. For example, a July 9, 2015 brokerage firm inquiry to Greenwald concerned cancelled orders in the account held in the name of EAC. The brokerage firm compliance analyst stated, "[t]he regulators have termed this type of order entry as spoofing, you have been previously warned regarding this. . . You must take immediate measures to avoid this situation in the future." Greenwald forwarded the email to Taub, and Taub provided the following response to Greenwald: "Did not realize I was creating a scenario of layering/spoofing. I will be extremely careful with my order preferences in the future to avoid a repeat of this scenario." Greenwald, under his own name and without copying Taub on the e-mail or otherwise identifying him, then provided Taub's language verbatim to the brokerage firm, all in an effort to conceal from the brokerage firm that Taub was trading in the account.

FIRST CLAIM FOR RELIEF
Violations of Sections 17(a)(1) and 17(a)(3) of the Securities Act
(All Defendants)

49. Paragraphs 1 through 48 and Exhibits 1-7 are incorporated by reference as if set forth fully herein.

50. By virtue of the foregoing, Defendants, directly or indirectly, singly or in concert with others, by use of the means or instruments of transportation or communication in interstate commerce, or of the mails, in the offer or sale of securities, employed devices, schemes, or artifices to defraud and engaged in transactions, practices, or courses of business which operated or would operate as a fraud or deceit upon the purchasers.

51. By virtue of the foregoing, Defendants violated and, unless restrained and enjoined, will continue violating, Sections 17(a)(1) and 17(a)(3) of the Securities Act, 15 U.S.C. §§ 77q(a)(1), 77q(a)(3).

SECOND CLAIM FOR RELIEF
Aiding and Abetting Violations of Sections 17(a)(1) and 17(a)(3) of the Securities Act
(All Defendants)

52. Paragraphs 1 through 48 and Exhibits 1-7 are incorporated by reference as if set forth fully herein.

53. By virtue of the foregoing, Defendants knowingly or recklessly provided substantial assistance to each other, each of whom are persons who directly or indirectly, singly or in concert with others, by use of the means or instruments of transportation or communication in interstate commerce, or of the mails in the offer or sale of securities, employed devices, schemes or artifices to defraud and engaged in transactions, practices, or courses of business which operated or would operate as a fraud or deceit upon the purchasers.

54. By virtue of the foregoing, Defendants aided and abetted and, unless restrained and enjoined, will continue aiding and abetting, violations of Sections 17(a)(1) and 17(a)(3) of the Securities Act, 15 U.S.C. §§ 77q(a)(1), 77q(a)(3), in violation of Section 15(b) of the Securities Act, 15 U.S.C. § 77o(b).

THIRD CLAIM FOR RELIEF
Violations of Section 10(b) of the Exchange Act and
Rules 10b-5(a) and 10b-5(c) Thereunder
(All Defendants)

55. Paragraphs 1 through 48 and Exhibits 1-7 are incorporated by reference as if set forth fully herein.

56. By virtue of the foregoing, Defendants, directly or indirectly, singly or in concert with others, in connection with the purchase or sale of a security, with scienter, used the means

or instrumentalities of interstate commerce, or of the mails, or of a facility of a national securities exchange to employ devices, schemes, or artifices to defraud and to engage in acts, practices, or courses of business which operated or would operate as a fraud or deceit upon others.

57. By virtue of the foregoing, Defendants violated and, unless restrained and enjoined, will continue violating, Section 10(b) of the Exchange Act, 15 U.S.C. § 78j(b) and Rules 10b-5(a) and 10b-5(c) thereunder, 17 C.F.R. §§ 240.10b-5(a), 240.10b-5(c).

FOURTH CLAIM FOR RELIEF
Aiding and Abetting Violations of Section 10(b) of the Exchange Act and
Rules 10b-5(a) and 10b-5(c) Thereunder
(All Defendants)

58. Paragraphs 1 through 48 and Exhibits 1-7 are incorporated by reference as if set forth fully herein.

59. By virtue of the foregoing, Defendants knowingly or recklessly provided substantial assistance to each other, each of whom are persons who directly or indirectly, singly or in concert with others, in connection with the purchase or sale of a security, with scienter, used the means or instrumentalities of interstate commerce, or of the mails, or of a facility of a national securities exchange to employ devices, schemes, or artifices to defraud and to engage in acts, practices, or courses of business which operated or would operate as a fraud or deceit upon others.

60. By virtue of the foregoing, Defendants aided and abetted and, unless restrained and enjoined, will continue aiding and abetting, violations of Section 10(b) of the Exchange Act, 15 U.S.C. § 78j(b) and Rules 10b-5(a) and 10b-5(c) thereunder, 17 C.F.R. §§ 240.10b-5(a), 240.10b-5(c), in violation of Section 20(e) of the Exchange Act, 15 U.S.C. § 78t(e).

FIFTH CLAIM FOR RELIEF
Violations of Section 9(a)(2) of the Exchange Act
(Defendants Taub and Shmalo)

61. Paragraphs 1 through 48 and Exhibits 1-7 are incorporated by reference as if set forth fully herein.

62. By virtue of the foregoing, Defendants Taub and Shmalo, directly or indirectly, by the use of the mails or means or instrumentalities of interstate commerce, or of a facility of a national securities exchange, effected, alone or with one or more other persons, a series of transactions in securities creating actual or apparent active trading in such securities, or raising or depressing the price of such securities, for the purpose of inducing the purchase or sale of such securities by others.

63. By virtue of the foregoing, Defendants Taub and Shmalo violated and, unless restrained and enjoined, will continue violating, Section 9(a)(2) of the Exchange Act, 15 U.S.C. § 78i(a)(2).

SIXTH CLAIM FOR RELIEF
Aiding and Abetting Violations of Section 9(a)(2) of the Exchange Act
(All Defendants)

64. Paragraphs 1 through 48 and Exhibits 1-7 are incorporated by reference as if set forth fully herein.

65. By virtue of the foregoing, Defendants Taub and Shmalo knowingly or recklessly provided substantial assistance to each other regarding their manipulative scheme, and Defendant Greenwald knowingly or recklessly provided substantial assistance to Taub and Shmalo regarding their manipulative scheme, and all three Defendants are persons who directly or indirectly, by the use of the mails or means or instrumentalities of interstate commerce, or of a facility of a national securities exchange, effected, alone or with one or more other persons, a series of transactions in securities creating actual or apparent active trading in such securities, or

raising or depressing the price of such securities, for the purpose of inducing the purchase or sale of such securities by others.

66. By virtue of the foregoing, Defendants aided and abetted and, unless restrained and enjoined, will continue to aid and abet, violations of, Section 9(a)(2) of the Exchange Act, 15 U.S.C. § 78i(a)(2).

PRAYER FOR RELIEF

WHEREFORE, the Commission respectfully requests that the Court enter a Final Judgment:

I.

Permanently restraining and enjoining Defendants, and each of his agents, servants, employees, attorneys and other persons in active concert or participation with them who receive actual notice of the injunction by personal service or otherwise from violating Section 17(a) of the Securities Act, 15 U.S.C. § 17q(a), and Sections 9(a)(2), 10(b) and 20(b) of the Exchange Act, 15 U.S.C. §§ 78i(a)(2), 78j(b), 78t(b), and Rule 10b-5 thereunder, 17 C.F.R. § 240.10b-5.

II.

Ordering Defendants to, jointly and severally, disgorge ill-gotten gains received as a result of the conduct alleged herein, plus prejudgment interest thereon.

III.

Ordering Defendants to pay civil money penalties pursuant to Section 20(d) of the Securities Act, 15 U.S.C. § 77t(d), and Section 21(d)(3) of the Exchange Act, 15 U.S.C. § 78u(d)(3).

IV.

Granting such other relief as this Court deems just and appropriate.

Dated: April 26, 2018

SECURITIES AND EXCHANGE COMMISSION

By: /s Jack Kaufman

Jack Kaufman
Senior Trial Counsel
Michael Ellis
Janna Berke
New York Regional Office
Brookfield Place, 200 Vesey Street
New York, NY 10281-1022
*Admitted in the U.S. District Court for the
Southern District of New York*
(212) 336-0106 (Kaufman)
Email: KaufmanJa@sec.gov

Local Counsel:

David E. Dauenheimer
Deputy Chief, Civil Division
United States Attorney's Office
District of New Jersey
970 Broad Street, Ste. 700
Newark, NJ 07102
Designated Pursuant to Local Rule 101.1(f)

Of Counsel:

Marc P. Berger, Regional Director
Lara S. Mehraban, Associate Regional Director
Wendy Tepperman

EXHIBIT 1

COORDINATED TRADING EVENT IN THE COMMON STOCK OF COMPANY A

JANUARY 8, 2015 FROM 11:46:08 AM TO 11:48:29 AM (Eastern Standard Time)

- A. On January 8, 2015, Defendants orchestrated a Coordinated Trading Event in Company A's stock, which traded on the NASDAQ exchange, from roughly 11:46:18 AM to 11:48:29 AM.
- B. For this particular Coordinated Trading Event, three of the Coordinated Accounts traded Company A stock. Defendant Taub was an authorized trader on the winner account (number ****9639), held in the names of Taub's wife and her father at Brokerage Firm 1 (hereinafter referred to in Exhibits 1 and 2 as the "winner" account). Taub controlled trading in one helper account (number ****0035), held in the name of EAC, although Greenwald was the authorized trader on the account and Taub was not (hereinafter referred to in the Exhibits as the "Greenwald helper" account). Shmalo was the authorized trader on a second helper account (number ****3808), held in the name of Shmalo and his relative (hereinafter referred to as the "Shmalo helper" account). Both helper accounts were held at Brokerage Firm 2.
- C. Between approximately 11:46:18 AM and 11:46:34 AM, the Greenwald helper account placed a series of six sell limit orders in Company A stock (totaling 2,500 shares), each at a progressively lower price (from \$69.69 to \$69.42). Only one of the sell limit orders, for 100 shares, was executed and it was executed at a price of \$69.42. The Greenwald helper account cancelled five of the sell orders (totaling 2,400 shares) with four of them being cancelled just after the winner account completed its accumulation. Between the time the first helper account sell order was placed and the winner account placed its first buy, the national best ask for Company A stock (that is, the lowest price at which market participants were offering to sell Company A stock) declined from \$69.73 per share to \$69.50 per share.
- D. Between approximately 11:46:42 AM and 11:47:23 AM, the winner account placed 4 purchase orders for a total of 7,200 Company A shares. Those orders were in increments of between 1,000 and 2,200 shares each and were executed at prices between \$69.44 per share and \$69.49 per share.
- E. At the same time that the winner account accumulated its 7,200 share position, the Greenwald helper account entered (between approximately 11:46:36 and 11:47:17) a new series of five sell limit orders (totaling 500 shares). Four of those orders were executed at prices between \$69.44 per share and \$69.50 per share; the Greenwald helper account cancelled the other order.
- F. The helper account sell orders, both before and during the winner account's accumulation, were designed to, and did, artificially lower the stock's market price before (and while) the winner account accumulated its 7,200 share position.
- G. After the winner account accumulated its 7,200 share position, the scheme reversed course to enable the winner account to liquidate at an artificially high price using a rapid series of

helper account buy limit orders to attempt to walk up the market price. Between 11:47:34 AM and 11:47:58 AM, the Greenwald and Shmalo helper accounts entered a series of 17 buy limit orders (totaling 2,400 shares), each generally at the same or progressively higher prices. Eight of these buy limit orders (totaling 800 shares) were executed, at prices ranging from \$69.68 to \$69.95 per share. (The helper accounts cancelled the other eight at or before the time the winner account began executing sell orders.) Between the time the first helper account buy order was placed and the winner account placed its first sell order, the national best bid for Company A stock (that is, the highest price at which market participants were offering to buy Company A stock), moved from \$69.38 to \$69.88.

- H. From approximately 11:48:04 AM to 11:48:20 AM, the winner account quickly sold off its 7,200 share position in Company A at a profit. The winner account placed a series of 6 sell market orders (ranging from 200 to 2,000 shares per order), which were executed at prices between \$69.80 and \$69.94 per share. During approximately the same time period that the winner account was liquidating its position, the Greenwald and Shmalo helper accounts entered a new series of three buy limit orders (totaling 300 shares), executed between \$69.94 and \$69.98 per share.
- I. The helper account buy limit orders both before and during the winner account's liquidation of the position were designed to, and did, artificially raise the stock's market price before and during the winner account's liquidation of its 7,200 share position.
- J. The final step of this Coordinated Trading Event was the two helper accounts' disposal of their smaller positions in Company A stock.
- K. The net profit from this Coordinated Trading Event, which lasted less than three minutes, was approximately \$3,024 and the trading constituted approximately 76% of the trading volume in Company A stock during that time period.
- L. On the same day, Defendants engaged in at least five Coordinated Trading Events in Company A's stock (*i.e.*, the above event and four others), netting profits of roughly \$15,450. In addition on January 8, 2015, Defendants engaged in numerous other Coordinated Trading Events involving other companies' stock. Thus, on January 8, 2015, Defendants engaged in a total of at least 52 Coordinated Trading Events, netting profits of roughly \$70,545.

Company A January 8, 2015
11:46 AM - 11:48 AM

| ID | Source | Account | Account Name | Order Time | Execution Time | Cancel Time | Buy/Sell | Order Type | Order Quantity | Execution Quantity | Share Balance | Order Price | Execution Price | Best Bid | Best Ask |
|----|------------------|----------|--------------------|------------|----------------|-------------|----------|------------|----------------|--------------------|---------------|-------------|-----------------|----------|----------|
| 1 | BROKERAGE FIRM 2 | ****3808 | HELPER [SHMALO] | 11:46:08 | | 11:46:08 | Sell | limit | 100 | | | \$69.69 | | \$69.46 | \$69.73 |
| 2 | BROKERAGE FIRM 2 | ****3808 | HELPER [SHMALO] | 11:46:11 | | 11:46:12 | Sell | limit | 100 | | | \$69.77 | | \$69.47 | \$69.77 |
| 3 | BROKERAGE FIRM 2 | ****0035 | HELPER [GREENWALD] | 11:46:18 | | 11:47:27 | Sell | limit | 1,000 | | | \$69.69 | | \$69.46 | \$69.73 |
| 4 | BROKERAGE FIRM 2 | ****0035 | HELPER [GREENWALD] | 11:46:22 | | 11:47:27 | Sell | limit | 200 | | | \$69.60 | | \$69.42 | \$69.68 |
| 5 | BROKERAGE FIRM 2 | ****0035 | HELPER [GREENWALD] | 11:46:27 | | 11:47:27 | Sell | limit | 100 | | | \$69.57 | | \$69.42 | \$69.60 |
| 6 | BROKERAGE FIRM 2 | ****0035 | HELPER [GREENWALD] | 11:46:30 | | 11:47:27 | Sell | limit | 100 | | | \$69.53 | | \$69.42 | \$69.57 |
| 7 | BROKERAGE FIRM 2 | ****0035 | HELPER [GREENWALD] | 11:46:33 | | 11:46:34 | Sell | limit | 1,000 | | | \$69.50 | | \$69.42 | \$69.53 |
| 8 | BROKERAGE FIRM 2 | ****0035 | HELPER [GREENWALD] | 11:46:34 | 11:46:34 | | Sell | limit | 100 | 100 | (100) | \$69.42 | \$69.42 | \$69.42 | \$69.50 |
| 9 | BROKERAGE FIRM 2 | ****0035 | HELPER [GREENWALD] | 11:46:36 | | 11:46:59 | Sell | limit | 100 | | | \$69.49 | | \$69.42 | \$69.53 |
| 10 | BROKERAGE FIRM 1 | ****9639 | WINNER | 11:46:42 | 11:46:43 | | Buy | market | | 2,000 | 2,000 | | \$69.49 | \$69.42 | \$69.49 |
| 11 | BROKERAGE FIRM 1 | ****9639 | WINNER | 11:46:49 | 11:46:49 | | Buy | market | | 2,000 | 4,000 | | \$69.46 | \$69.42 | \$69.49 |
| 12 | BROKERAGE FIRM 2 | ****0035 | HELPER [GREENWALD] | 11:47:04 | 11:47:09 | | Sell | limit | 100 | 100 | (200) | \$69.46 | \$69.46 | \$69.37 | \$69.53 |
| 13 | BROKERAGE FIRM 2 | ****0035 | HELPER [GREENWALD] | 11:47:05 | 11:47:09 | | Sell | limit | 100 | 100 | (300) | \$69.44 | \$69.44 | \$69.37 | \$69.46 |
| 14 | BROKERAGE FIRM 1 | ****9639 | WINNER | 11:47:09 | 11:47:10 | | Buy | market | | 1,000 | 5,000 | | \$69.44 | \$69.37 | \$69.44 |
| 15 | BROKERAGE FIRM 2 | ****0035 | HELPER [GREENWALD] | 11:47:16 | 11:47:16 | | Sell | limit | 100 | 100 | (400) | \$69.46 | \$69.46 | \$69.37 | \$69.53 |
| 16 | BROKERAGE FIRM 2 | ****0035 | HELPER [GREENWALD] | 11:47:17 | 11:47:20 | | Sell | limit | 100 | 100 | (500) | \$69.50 | \$69.50 | \$69.37 | \$69.53 |
| 17 | BROKERAGE FIRM 1 | ****9639 | WINNER | 11:47:23 | 11:47:23 | | Buy | market | | 2,200 | 7,200 | | \$69.48 | \$69.37 | \$69.53 |
| 18 | BROKERAGE FIRM 2 | ****0035 | HELPER [GREENWALD] | 11:47:34 | | 11:47:46 | Buy | limit | 500 | | | \$69.48 | | \$69.38 | \$69.65 |
| 19 | BROKERAGE FIRM 2 | ****0035 | HELPER [GREENWALD] | 11:47:42 | 11:47:42 | | Buy | limit | 100 | 100 | (400) | \$69.68 | \$69.68 | \$69.48 | \$69.68 |
| 20 | BROKERAGE FIRM 2 | ****0035 | HELPER [GREENWALD] | 11:47:46 | | 11:48:15 | Buy | limit | 400 | | | \$69.65 | | \$69.49 | \$69.77 |
| 21 | BROKERAGE FIRM 2 | ****0035 | HELPER [GREENWALD] | 11:47:47 | 11:47:47 | | Buy | limit | 100 | 100 | (300) | \$69.77 | \$69.77 | \$69.65 | \$69.77 |
| 22 | BROKERAGE FIRM 2 | ****0035 | HELPER [GREENWALD] | 11:47:48 | 11:47:48 | | Buy | limit | 100 | 100 | (200) | \$69.80 | \$69.80 | \$69.65 | \$69.80 |
| 23 | BROKERAGE FIRM 2 | ****0035 | HELPER [GREENWALD] | 11:47:49 | | 11:48:15 | Buy | limit | 100 | | | \$69.79 | | \$69.73 | \$69.81 |
| 24 | BROKERAGE FIRM 2 | ****0035 | HELPER [GREENWALD] | 11:47:50 | | 11:48:15 | Buy | limit | 100 | | | \$69.79 | | \$69.79 | \$69.84 |
| 25 | BROKERAGE FIRM 2 | ****0035 | HELPER [GREENWALD] | 11:47:50 | | 11:48:15 | Buy | limit | 100 | | | \$69.79 | | \$69.79 | \$69.84 |
| 26 | BROKERAGE FIRM 2 | ****0035 | HELPER [GREENWALD] | 11:47:50 | 11:47:50 | | Buy | limit | 100 | 100 | (100) | \$69.84 | \$69.84 | \$69.79 | \$69.84 |
| 27 | BROKERAGE FIRM 2 | ****0035 | HELPER [GREENWALD] | 11:47:51 | 11:47:51 | | Buy | limit | 100 | 100 | 0 | \$69.85 | \$69.85 | \$69.79 | \$69.85 |
| 28 | BROKERAGE FIRM 2 | ****0035 | HELPER [GREENWALD] | 11:47:52 | | 11:48:15 | Buy | limit | 100 | | | \$69.83 | | \$69.79 | \$69.93 |
| 29 | BROKERAGE FIRM 2 | ****0035 | HELPER [GREENWALD] | 11:47:55 | | 11:48:15 | Buy | limit | 100 | | | \$69.85 | | \$69.83 | \$69.93 |
| 30 | BROKERAGE FIRM 2 | ****3808 | HELPER [SHMALO] | 11:47:56 | 11:47:56 | | Buy | limit | 100 | 100 | | \$69.93 | \$69.93 | \$69.85 | \$69.93 |
| 31 | BROKERAGE FIRM 2 | ****0035 | HELPER [GREENWALD] | 11:47:56 | 11:47:56 | | Buy | limit | 100 | 100 | | \$69.93 | \$69.93 | \$69.85 | \$69.93 |
| 32 | BROKERAGE FIRM 2 | ****3808 | HELPER [SHMALO] | 11:47:57 | 11:47:57 | | Buy | limit | 100 | 100 | | \$69.95 | \$69.95 | \$69.85 | \$69.95 |
| 33 | BROKERAGE FIRM 2 | ****3808 | HELPER [SHMALO] | 11:47:57 | | 11:48:04 | Buy | limit | 100 | | | \$69.88 | | \$69.85 | \$69.95 |
| 34 | BROKERAGE FIRM 2 | ****3808 | HELPER [SHMALO] | 11:47:58 | | 11:48:04 | Buy | limit | 100 | | | \$69.91 | | \$69.88 | \$69.95 |
| 35 | BROKERAGE FIRM 1 | ****9639 | WINNER | 11:48:03 | 11:48:04 | | Sell | market | | 1,000 | 6,200 | | \$69.93 | \$69.91 | \$69.98 |
| 36 | BROKERAGE FIRM 1 | ****9639 | WINNER | 11:48:07 | 11:48:07 | | Sell | market | | 1,000 | 5,200 | | \$69.93 | \$69.91 | \$69.94 |
| 37 | BROKERAGE FIRM 2 | ****3808 | HELPER [SHMALO] | 11:48:09 | 11:48:10 | | Buy | limit | 100 | 100 | 300 | \$69.94 | \$69.94 | \$69.91 | \$69.98 |
| 38 | BROKERAGE FIRM 1 | ****9639 | WINNER | 11:48:09 | 11:48:09 | | Sell | market | | 2,000 | 3,200 | | \$69.94 | \$69.91 | \$69.98 |
| 39 | BROKERAGE FIRM 2 | ****3808 | HELPER [SHMALO] | 11:48:10 | 11:48:10 | | Buy | limit | 100 | 100 | 400 | \$69.98 | \$69.93 | \$69.94 | \$69.98 |
| 40 | BROKERAGE FIRM 2 | ****3808 | HELPER [SHMALO] | 11:48:12 | 11:48:14 | | Buy | limit | 100 | 100 | 500 | \$69.94 | \$69.94 | \$69.91 | \$69.98 |
| 41 | BROKERAGE FIRM 1 | ****9639 | WINNER | 11:48:12 | 11:48:12 | | Sell | market | | 1,000 | 2,200 | | \$69.91 | \$69.91 | \$69.98 |
| 42 | BROKERAGE FIRM 1 | ****9639 | WINNER | 11:48:13 | 11:48:14 | | Sell | market | | 2,000 | 200 | | \$69.93 | \$69.94 | \$69.98 |
| 43 | BROKERAGE FIRM 2 | ****0035 | HELPER [GREENWALD] | 11:48:16 | 11:48:16 | | Sell | limit | 100 | 100 | 0 | \$69.91 | \$69.91 | \$69.91 | \$69.98 |
| 44 | BROKERAGE FIRM 2 | ****3808 | HELPER [SHMALO] | 11:48:17 | 11:48:18 | 11:48:18 | Sell | limit* | 500 | 100 | 400 | \$69.84 | \$69.85 | \$69.87 | \$69.98 |
| 45 | BROKERAGE FIRM 1 | ****9639 | WINNER | 11:48:19 | 11:48:20 | | Sell | market | | 200 | 0 | | \$69.80 | \$69.73 | \$69.92 |
| 46 | BROKERAGE FIRM 2 | ****3808 | HELPER [SHMALO] | 11:48:22 | 11:48:22 | 11:48:24 | Sell | limit* | 400 | 200 | 200 | \$69.77 | \$69.77 | \$69.73 | \$69.91 |
| 47 | BROKERAGE FIRM 2 | ****3808 | HELPER [SHMALO] | 11:48:29 | 11:48:29 | | Sell | limit | 200 | 200 | 0 | \$69.51 | \$69.69 | \$69.68 | \$69.92 |

Note: If an order was filled through multiple transactions, then the execution time is the time of the first transaction.

*Indicates that an order was partially executed.

| Source | Account | Name | Shares | Dollars Invested | Profit Realized |
|------------------|----------|--------------------|--------|------------------|-----------------|
| BROKERAGE FIRM 1 | ****9639 | WINNER | 7,200 | \$500,185 | \$3,285 |
| BROKERAGE FIRM 2 | ****0035 | HELPER [GREENWALD] | 600 | \$41,887 | -\$168 |
| BROKERAGE FIRM 2 | ****3808 | HELPER [SHMALO] | 500 | \$34,969 | -\$93 |
| TOTAL | | | 8,300 | \$577,041 | \$3,024 |

EXHIBIT 2

COORDINATED TRADING EVENT IN THE COMMON STOCK OF COMPANY B

JUNE 18, 2015 FROM 9:54:38 AM THROUGH 9:56:39 AM (Eastern Standard Time)

- A. On June 18, 2015, Defendants orchestrated a Coordinated Trading Event in Company B's stock, which traded on the NASDAQ exchange, from roughly 9:54:38 AM through 9:56:39 AM.
- B. For this particular Coordinated Trading Event, two of the Coordinated Accounts traded Company B stock. Defendant Taub controlled trading in both the winner account (the aforementioned ****9639 account held in the names of Taub's wife and her father at Brokerage Firm 1) and the Greenwald helper account (the aforementioned account number ****0035 account held in the name of EAC at Brokerage Firm 2 for which Greenwald was an authorized trader).
- C. Between approximately 9:54:38 AM and 9:54:54 AM, the Greenwald helper account placed a series of six sell limit orders in Company B stock (totaling 800 shares), all but two of which were at a progressively lower price (ranging from \$79.59 to \$79.35), each of which were executed. Between the time the first helper account sell order was placed and the winner account placed its first buy order, the national best ask for Company B stock (that is, the lowest price at which market participants were offering to sell Company B stock) declined from \$79.69 per share to \$79.41 per share.
- D. Between 9:54:57 AM and 9:56:04 AM, the winner account placed seven purchase orders for a total of 7,300 Company B shares. These orders were in increments between 1,000 and 1,150 each and were executed at prices between \$79.35 and \$79.70 per share.
- E. At the same time that the winner account accumulated its 7,300 share position, the Greenwald helper account placed a new series of four sell limit orders totaling 400 shares. Two of these orders were executed and the Greenwald helper account cancelled the other two orders once the winner account accumulation was complete.
- F. The Greenwald helper account sell orders both before and during the winner account's accumulation were designed to, and did, artificially lower the market price before and while the winner account accumulated its 7,300 share position.
- G. After the winner account accumulated its 7,300 share position, the scheme reversed course to enable the winner account to liquidate at an artificially high price using a rapid series of helper account buy limit orders to attempt to walk up the market price. Between 9:56:05 AM and 9:56:26 AM, the Greenwald helper account entered a series of 18 buy limit orders, generally moving towards increasing the price. Ten of these buy orders were executed (totaling 1,200 shares), at prices ranging from \$73.73 to \$80.09. (The Greenwald helper account cancelled the other eight orders immediately following the completion of the winner account's liquidation). Between the time the first helper account buy order was placed and the winner account placed its first sell order, the

national best bid for Company B stock (that is, the highest price at which market participants were offering to buy Company B stock), moved from \$79.52 to \$80.03.

- H. After entering the series of buy orders in the helper account, the winner account liquidated its position from 9:56:26 AM to 9:56:37 AM through a series of four market orders of between 1,300 and 2,000 shares each, which were executed at prices between \$80.08 and \$80.46. While the winner account liquidated its position, the Greenwald helper account placed a new series of six buy limit orders of 100 shares each. Half of these buy limit orders were executed (at prices between \$80.20 and \$80.42) while the Greenwald helper account cancelled the other half of the orders following the winner account's liquidation.
- I. The Greenwald helper account buy limit orders both before and during the winner account's liquidation of the position were designed to, and did, artificially raise the stock's market price before and while the winner account liquidated its 7,300 share position.
- J. To close out this particular Coordinated Trading Event, the Greenwald helper account sold its remaining position in Company B stock.
- K. The net profit from this Coordinated Trading Event, which lasted roughly two minutes, was approximately \$4,613 and the trading constituted approximately 57% of the trading volume in Company B's stock during that time period:
- L. On the same day, Defendants engaged in at least 12 separate Coordinated Trading Events in the stock of Company B (*i.e.*, the above event and 11 others), netting profits of roughly \$32,391. In addition on June 18, 2015, Defendants engaged in numerous other Coordinated Trading Events involving other companies' stock. Thus, on June 18, 2015, Defendants engaged in a total of at least 46 Coordinated Trading Events, netting profits of roughly \$83,697.

Company B June 18, 2015
9:54 AM - 9:56 AM

| ID | Source | Account | Account Name | Order Time | Execution Time | Cancel Time | Buy/Sell | Order Type | Order Quantity | Execution Quantity | Share Balance | Order Price | Execution Price | Best Bid | Best Ask |
|----|------------------|----------|--------------------|------------|----------------|-------------|----------|------------|----------------|--------------------|---------------|-------------|-----------------|----------|----------|
| 1 | BROKERAGE FIRM 2 | ****0035 | HELPER [GREENWALD] | 9:54:38 | 9:55:16 | | Sell | limit | 200 | 200 | (200) | \$79.59 | \$79.59 | \$79.36 | \$79.69 |
| 2 | BROKERAGE FIRM 2 | ****0035 | HELPER [GREENWALD] | 9:54:40 | 9:55:15 | | Sell | limit | 100 | 100 | (300) | \$79.52 | \$79.52 | \$79.35 | \$79.59 |
| 3 | BROKERAGE FIRM 2 | ****0035 | HELPER [GREENWALD] | 9:54:49 | 9:54:49 | | Sell | limit | 200 | 200 | (500) | \$79.35 | \$79.35 | \$79.35 | \$79.52 |
| 4 | BROKERAGE FIRM 2 | ****0035 | HELPER [GREENWALD] | 9:54:51 | 9:55:08 | | Sell | limit | 100 | 100 | (600) | \$79.47 | \$79.47 | \$79.35 | \$79.52 |
| 5 | BROKERAGE FIRM 2 | ****0035 | HELPER [GREENWALD] | 9:54:52 | 9:54:52 | | Sell | limit | 100 | 100 | (700) | \$79.37 | \$79.37 | \$79.35 | \$79.47 |
| 6 | BROKERAGE FIRM 2 | ****0035 | HELPER [GREENWALD] | 9:54:54 | 9:55:03 | | Sell | limit | 100 | 100 | (800) | \$79.41 | \$79.41 | \$79.27 | \$79.47 |
| 7 | BROKERAGE FIRM 1 | ****9639 | WINNER | 9:54:56 | 9:54:57 | | Buy | market | | 1,150 | 1,150 | | \$79.37 | \$79.27 | \$79.41 |
| 8 | BROKERAGE FIRM 1 | ****9639 | WINNER | 9:55:02 | 9:55:02 | | Buy | market | | 1,000 | 2,150 | | \$79.35 | \$79.27 | \$79.40 |
| 9 | BROKERAGE FIRM 2 | ****0035 | HELPER [GREENWALD] | 9:55:04 | 9:55:04 | | Sell | limit | 100 | 100 | (900) | \$79.27 | \$79.29 | \$79.27 | \$79.45 |
| 10 | BROKERAGE FIRM 1 | ****9639 | WINNER | 9:55:08 | 9:55:09 | | Buy | market | | 1,000 | 3,150 | | \$79.46 | \$79.27 | \$79.47 |
| 11 | BROKERAGE FIRM 1 | ****9639 | WINNER | 9:55:14 | 9:55:15 | | Buy | market | | 1,000 | 4,150 | | \$79.46 | \$79.29 | \$79.52 |
| 12 | BROKERAGE FIRM 2 | ****0035 | HELPER [GREENWALD] | 9:55:21 | 9:55:28 | | Sell | limit | 100 | 100 | (1,000) | \$79.70 | \$79.70 | \$79.49 | \$79.83 |
| 13 | BROKERAGE FIRM 1 | ****9639 | WINNER | 9:55:27 | 9:55:28 | | Buy | market | | 1,150 | 5,300 | | \$79.66 | \$79.49 | \$79.70 |
| 14 | BROKERAGE FIRM 1 | ****9639 | WINNER | 9:55:37 | 9:55:38 | | Buy | market | | 1,000 | 6,300 | | \$79.70 | \$79.51 | \$79.81 |
| 15 | BROKERAGE FIRM 2 | ****0035 | HELPER [GREENWALD] | 9:55:55 | | 9:56:04 | Sell | limit | 100 | | | \$79.80 | | \$79.59 | \$79.97 |
| 16 | BROKERAGE FIRM 2 | ****0035 | HELPER [GREENWALD] | 9:56:01 | | 9:56:04 | Sell | limit | 100 | | | \$79.73 | | \$79.52 | \$79.80 |
| 17 | BROKERAGE FIRM 1 | ****9639 | WINNER | 9:56:03 | 9:56:04 | | Buy | market | | 1,000 | 7,300 | | \$79.64 | \$79.52 | \$79.73 |
| 18 | BROKERAGE FIRM 2 | ****0035 | HELPER [GREENWALD] | 9:56:05 | 9:56:06 | | Buy | limit | 100 | 100 | (900) | \$79.73 | \$79.73 | \$79.52 | \$79.73 |
| 19 | BROKERAGE FIRM 2 | ****0035 | HELPER [GREENWALD] | 9:56:06 | 9:56:06 | | Buy | limit | 100 | 100 | (800) | \$79.73 | \$79.73 | \$79.52 | \$79.73 |
| 20 | BROKERAGE FIRM 2 | ****0035 | HELPER [GREENWALD] | 9:56:07 | 9:56:07 | | Buy | limit | 100 | 100 | (700) | \$79.73 | \$79.73 | \$79.52 | \$79.73 |
| 21 | BROKERAGE FIRM 2 | ****0035 | HELPER [GREENWALD] | 9:56:07 | 9:56:07 | | Buy | limit | 100 | 100 | (600) | \$79.73 | \$79.73 | \$79.52 | \$79.73 |
| 22 | BROKERAGE FIRM 2 | ****0035 | HELPER [GREENWALD] | 9:56:12 | | 9:56:38 | Buy | limit | 600 | | | \$79.66 | | \$79.55 | \$79.97 |
| 23 | BROKERAGE FIRM 2 | ****0035 | HELPER [GREENWALD] | 9:56:15 | | 9:56:38 | Buy | limit | 200 | | | \$79.77 | | \$79.66 | \$79.89 |
| 24 | BROKERAGE FIRM 2 | ****0035 | HELPER [GREENWALD] | 9:56:17 | 9:56:17 | | Buy | limit | 300 | 300 | (300) | \$79.90 | \$79.90 | \$79.77 | \$79.90 |
| 25 | BROKERAGE FIRM 2 | ****0035 | HELPER [GREENWALD] | 9:56:17 | | 9:56:38 | Buy | limit | 100 | | | \$79.77 | | \$79.77 | \$79.90 |
| 26 | BROKERAGE FIRM 2 | ****0035 | HELPER [GREENWALD] | 9:56:18 | 9:56:18 | | Buy | limit | 100 | 100 | (200) | \$79.98 | \$79.97 | \$79.77 | \$79.98 |
| 27 | BROKERAGE FIRM 2 | ****0035 | HELPER [GREENWALD] | 9:56:18 | 9:56:18 | | Buy | limit | 100 | 100 | (100) | \$80.00 | \$80.00 | \$79.77 | \$79.98 |
| 28 | BROKERAGE FIRM 2 | ****0035 | HELPER [GREENWALD] | 9:56:19 | 9:56:19 | | Buy | limit | 100 | 100 | 0 | \$80.00 | \$80.00 | \$79.77 | \$80.00 |
| 29 | BROKERAGE FIRM 2 | ****0035 | HELPER [GREENWALD] | 9:56:21 | | 9:56:38 | Buy | limit | 100 | | | \$79.84 | | \$79.77 | \$79.98 |
| 30 | BROKERAGE FIRM 2 | ****0035 | HELPER [GREENWALD] | 9:56:21 | | 9:56:38 | Buy | limit | 100 | | | \$79.84 | | \$79.77 | \$79.98 |
| 31 | BROKERAGE FIRM 2 | ****0035 | HELPER [GREENWALD] | 9:56:22 | 9:56:22 | | Buy | limit | 100 | 100 | 100 | \$79.98 | \$79.98 | \$79.84 | \$79.98 |
| 32 | BROKERAGE FIRM 2 | ****0035 | HELPER [GREENWALD] | 9:56:23 | 9:56:23 | | Buy | limit | 100 | 100 | 200 | \$80.09 | \$80.09 | \$79.85 | \$80.09 |
| 33 | BROKERAGE FIRM 2 | ****0035 | HELPER [GREENWALD] | 9:56:24 | | 9:56:38 | Buy | limit | 100 | | | \$79.88 | | \$79.85 | \$80.09 |
| 34 | BROKERAGE FIRM 2 | ****0035 | HELPER [GREENWALD] | 9:56:24 | | 9:56:38 | Buy | limit | 100 | | | \$79.88 | | \$79.85 | \$80.09 |
| 35 | BROKERAGE FIRM 2 | ****0035 | HELPER [GREENWALD] | 9:56:26 | | 9:56:38 | Buy | limit | 100 | | | \$80.05 | | \$80.03 | \$80.42 |
| 36 | BROKERAGE FIRM 1 | ****9639 | WINNER | 9:56:26 | 9:56:26 | | Sell | market | | 2,000 | 5,300 | | \$80.08 | \$80.03 | \$80.42 |
| 37 | BROKERAGE FIRM 2 | ****0035 | HELPER [GREENWALD] | 9:56:27 | 9:56:27 | | Buy | limit | 100 | 100 | 300 | \$80.42 | \$80.42 | \$80.06 | \$80.42 |
| 38 | BROKERAGE FIRM 2 | ****0035 | HELPER [GREENWALD] | 9:56:28 | | 9:56:38 | Buy | limit | 100 | | | \$80.09 | | \$80.06 | \$80.42 |
| 39 | BROKERAGE FIRM 2 | ****0035 | HELPER [GREENWALD] | 9:56:29 | 9:56:29 | | Buy | limit | 100 | 100 | 400 | \$80.41 | \$80.36 | \$80.09 | \$80.42 |
| 40 | BROKERAGE FIRM 1 | ****9639 | WINNER | 9:56:29 | 9:56:29 | | Sell | market | | 2,000 | 3,300 | | \$80.18 | \$80.09 | \$80.42 |
| 41 | BROKERAGE FIRM 2 | ****0035 | HELPER [GREENWALD] | 9:56:31 | 9:56:31 | | Buy | limit | 100 | 100 | 500 | \$80.20 | \$80.20 | \$80.10 | \$80.42 |
| 42 | BROKERAGE FIRM 1 | ****9639 | WINNER | 9:56:31 | 9:56:32 | | Sell | market | | 2,000 | 1,300 | | \$80.15 | \$80.10 | \$80.42 |
| 43 | BROKERAGE FIRM 2 | ****0035 | HELPER [GREENWALD] | 9:56:33 | | 9:56:38 | Buy | limit | 100 | | | \$80.27 | | \$80.25 | \$80.42 |
| 44 | BROKERAGE FIRM 2 | ****0035 | HELPER [GREENWALD] | 9:56:35 | | 9:56:38 | Buy | limit | 100 | | | \$80.37 | | \$80.28 | \$80.62 |
| 45 | BROKERAGE FIRM 1 | ****9639 | WINNER | 9:56:36 | 9:56:37 | | Sell | market | | 1,300 | 0 | | \$80.46 | \$80.37 | \$80.62 |
| 46 | BROKERAGE FIRM 2 | ****0035 | HELPER [GREENWALD] | 9:56:39 | 9:56:39 | | Sell | limit | 500 | 500 | 0 | \$80.37 | \$80.37 | \$80.37 | \$80.64 |

Note: If an order was filled through multiple transactions, then the execution time is the time of the first transaction
 *Indicates that an order was partially executed.

| Source | Account | Name | Shares | Dollars Invested | Profit Realized |
|------------------|----------|--------------------|--------|------------------|-----------------|
| BROKERAGE FIRM 1 | ****9639 | WINNER | 7,300 | \$580,492 | \$4,927 |
| BROKERAGE FIRM 2 | ****0035 | HELPER [GREENWALD] | 1,500 | \$119,964 | -\$314 |
| TOTAL | | | 8,800 | \$700,456 | \$4,613 |

EXHIBIT 3

COORDINATED TRADING EVENT IN THE COMMON STOCK OF COMPANY C

SEPTEMBER 25, 2015 FROM 9:50:48 AM TO 9:54:26 AM (Eastern Standard Time)

- A. On September 25, 2015, Defendants orchestrated a Coordinated Trading Event in Company C's stock, which traded on the NYSE, from roughly 9:50:48 AM to 9:54:26 AM.
- B. For this particular Coordinated Trading Event, two of the Coordinated Accounts traded Company C stock. The winner account was account number ****1113 at Brokerage Firm 3, which was held in the name of Defendant Shmalo. The helper account was the aforementioned account number ****3808 held in the name of Defendant Shmalo and his relative at Brokerage Firm 2.
- C. From 9:50:48 AM to 9:51:19 AM, the Shmalo helper account placed a series of 21 sell limit orders in Company C stock for 100 shares each (totaling 2,100 shares), generally moving towards lowering the price (from \$20.03 to \$19.52). The Shmalo helper account cancelled five of the first six sell orders (totaling 500 shares), when they weren't filled by the time the winner account was trading; the rest of the orders were executed at prices between \$19.46 and 19.81. Between the time the first helper account sell order was placed and the winner account placed its first buy order, the national best ask for Company C stock (that is, the lowest price at which market participants were offering to sell Company C stock) declined from \$20.10 per share to \$19.52 per share.
- D. Between 9:51:22 AM and 9:52:18 AM, the winner account placed a series of 11 buy market orders for a total of 17,000 Company C shares. Eight of these orders were for 1,500 shares, two were for 1,000 shares and one order was for 3,000 shares. These buy orders were executed at prices ranging from \$19.39 per share to \$20.13 per share.
- E. The Shmalo helper account sell orders were designed to, and did, artificially lower the stock's market price before the winner account accumulated its position.
- F. After the winner accumulated its 17,000 share position, the scheme reversed course to enable the winner account to liquidate at an artificially high price using a rapid series of buy limit orders placed in the helper accounts to attempt to walk up the market price. From 9:52:24 to 9:53:32, the Shmalo helper account placed a new series of 32 smaller buy limit orders, ranging in size from 100 shares to 1,500 shares and increasing in price from \$20.10 to \$21.42. Eight of the buy limit orders were executed. The Shmalo helper account cancelled 22 of the orders and partially cancelled two others. Between the time the first helper account buy order was placed and the winner account placed its first sell order, the national best bid for Company C stock (that is, the highest price at which market participants were offering to buy Company C stock) increased from \$19.76 per share to \$21.36 per share.
- G. As the helper account was accumulating its position, the winner account began to liquidate. Between 9:53:42 and 9:54:18, the winner account placed six market sell orders of 2,500

shares each and one market sell order of 2,000 shares, executed at prices ranging from \$20.89 to \$21.57 per share.

- H. During approximately the same time period that the winner account was liquidating its position, the helper account entered a new series of seven buy limit orders of 100 shares each, which were executed at prices between \$20.86 and \$21.29.
- I. The helper account buy limit orders both before and during the winner account's liquidation of the position were designed to, and did, artificially raise the market price before and while the winner account liquidated its 17,000 share position.
- J. To close out this particular Coordinated Trading Event, the helper account sold its remaining position in Company C stock.
- K. The net profit from this Coordinated Trading Event, which lasted fewer than four minutes, was approximately \$21,162 and the trading constituted approximately 87% of the trading volume of Company C stock during that time period:
- L. The Coordinated Trading Event in Company C's stock was just one of many Coordinated Trading Events that the Defendants engaged in on that same day. Defendants engaged in a total of at least 41 Coordinated Trading Events on September 25, 2015, netting profits of roughly \$104,822.

Company C September 25, 2015
9:50 AM - 9:54 AM

| ID | Source | Account | Role | Order Time | Execution Time | Cancel Time | Buy/Sell | Order Type | Order Quantity | Execution Quantity | Share Balance | Order Price | Execution Price | Best Bid | Best Ask |
|----|------------------|----------|-----------------|------------|----------------|-------------|----------|------------|----------------|--------------------|---------------|-------------|-----------------|----------|----------|
| 1 | BROKERAGE FIRM 2 | ****3808 | HELPER [SHMALO] | 9:50:48 | | 9:51:32 | Sell | limit | 100 | | | \$20.03 | | \$19.72 | \$20.10 |
| 2 | BROKERAGE FIRM 2 | ****3808 | HELPER [SHMALO] | 9:50:50 | | 9:51:32 | Sell | limit | 100 | | | \$19.92 | | \$19.81 | \$20.03 |
| 3 | BROKERAGE FIRM 2 | ****3808 | HELPER [SHMALO] | 9:50:52 | | 9:51:32 | Sell | limit | 100 | | | \$19.89 | | \$19.81 | \$19.92 |
| 4 | BROKERAGE FIRM 2 | ****3808 | HELPER [SHMALO] | 9:50:54 | 9:50:54 | | Sell | limit | 100 | 100 | (100) | \$19.81 | \$19.81 | \$19.81 | \$19.89 |
| 5 | BROKERAGE FIRM 2 | ****3808 | HELPER [SHMALO] | 9:50:55 | | 9:51:37 | Sell | limit | 100 | | | \$19.77 | | \$19.57 | \$19.87 |
| 6 | BROKERAGE FIRM 2 | ****3808 | HELPER [SHMALO] | 9:50:58 | | 9:51:37 | Sell | limit | 100 | | | \$19.73 | | \$19.53 | \$19.77 |
| 7 | BROKERAGE FIRM 2 | ****3808 | HELPER [SHMALO] | 9:51:00 | 9:51:35 | | Sell | limit | 100 | 100 | (200) | \$19.67 | \$19.67 | \$19.45 | \$19.73 |
| 8 | BROKERAGE FIRM 2 | ****3808 | HELPER [SHMALO] | 9:51:01 | 9:51:01 | | Sell | limit | 100 | 100 | (300) | \$19.46 | \$19.46 | \$19.46 | \$19.67 |
| 9 | BROKERAGE FIRM 2 | ****3808 | HELPER [SHMALO] | 9:51:02 | 9:51:02 | | Sell | limit | 100 | 100 | (400) | \$19.46 | \$19.46 | \$19.46 | \$19.67 |
| 10 | BROKERAGE FIRM 2 | ****3808 | HELPER [SHMALO] | 9:51:03 | 9:51:35 | | Sell | limit | 100 | 100 | (500) | \$19.64 | \$19.64 | \$19.46 | \$19.67 |
| 11 | BROKERAGE FIRM 2 | ****3808 | HELPER [SHMALO] | 9:51:05 | 9:51:30 | | Sell | limit | 100 | 100 | (600) | \$19.60 | \$19.60 | \$19.47 | \$19.64 |
| 12 | BROKERAGE FIRM 2 | ****3808 | HELPER [SHMALO] | 9:51:06 | 9:51:06 | | Sell | limit | 100 | 100 | (700) | \$19.47 | \$19.47 | \$19.47 | \$19.60 |
| 13 | BROKERAGE FIRM 2 | ****3808 | HELPER [SHMALO] | 9:51:07 | 9:51:07 | | Sell | limit | 100 | 100 | (800) | \$19.46 | \$19.46 | \$19.46 | \$19.60 |
| 14 | BROKERAGE FIRM 2 | ****3808 | HELPER [SHMALO] | 9:51:08 | 9:51:30 | | Sell | limit | 100 | 100 | (900) | \$19.55 | \$19.55 | \$19.46 | \$19.60 |
| 15 | BROKERAGE FIRM 2 | ****3808 | HELPER [SHMALO] | 9:51:09 | 9:51:09 | | Sell | limit | 100 | 100 | (1,000) | \$19.46 | \$19.46 | \$19.46 | \$19.55 |
| 16 | BROKERAGE FIRM 2 | ****3808 | HELPER [SHMALO] | 9:51:11 | 9:51:11 | | Sell | limit | 100 | 100 | (1,100) | \$19.51 | \$19.51 | \$19.46 | \$19.55 |
| 17 | BROKERAGE FIRM 2 | ****3808 | HELPER [SHMALO] | 9:51:12 | 9:51:13 | | Sell | limit | 100 | 100 | (1,200) | \$19.52 | \$19.52 | \$19.46 | \$19.55 |
| 18 | BROKERAGE FIRM 2 | ****3808 | HELPER [SHMALO] | 9:51:13 | 9:51:13 | | Sell | limit | 100 | 100 | (1,300) | \$19.46 | \$19.46 | \$19.46 | \$19.55 |
| 19 | BROKERAGE FIRM 2 | ****3808 | HELPER [SHMALO] | 9:51:15 | 9:51:17 | | Sell | limit | 100 | 100 | (1,400) | \$19.49 | \$19.49 | \$19.25 | \$19.55 |
| 20 | BROKERAGE FIRM 2 | ****3808 | HELPER [SHMALO] | 9:51:17 | 9:51:17 | | Sell | limit | 100 | 100 | (1,500) | \$19.46 | \$19.46 | \$19.25 | \$19.49 |
| 21 | BROKERAGE FIRM 2 | ****3808 | HELPER [SHMALO] | 9:51:19 | 9:51:30 | | Sell | limit | 100 | 100 | (1,600) | \$19.52 | \$19.52 | \$19.26 | \$19.55 |
| 22 | BROKERAGE FIRM 3 | ****1113 | WINNER | 9:51:21 | 9:51:22 | | Buy | market | 1,500 | 1,500 | 1,500 | | \$19.50 | \$19.26 | \$19.52 |
| 23 | BROKERAGE FIRM 3 | ****1113 | WINNER | 9:51:24 | 9:51:29 | | Buy | market | 1,500 | 1,500 | 3,000 | | \$19.39 | \$19.27 | \$19.52 |
| 24 | BROKERAGE FIRM 3 | ****1113 | WINNER | 9:51:27 | 9:51:29 | | Buy | market | 1,500 | 1,500 | 4,500 | | \$19.50 | \$19.29 | \$19.52 |
| 25 | BROKERAGE FIRM 3 | ****1113 | WINNER | 9:51:30 | 9:51:36 | | Buy | market | 1,500 | 1,500 | 6,000 | | \$19.54 | \$19.29 | \$19.52 |
| 26 | BROKERAGE FIRM 3 | ****1113 | WINNER | 9:51:34 | 9:51:36 | | Buy | market | 1,500 | 1,500 | 7,500 | | \$19.68 | \$19.31 | \$19.64 |
| 27 | BROKERAGE FIRM 3 | ****1113 | WINNER | 9:51:40 | 9:51:41 | | Buy | market | 1,500 | 1,500 | 9,000 | | \$19.57 | \$19.33 | \$19.80 |
| 28 | BROKERAGE FIRM 3 | ****1113 | WINNER | 9:51:47 | 9:51:51 | | Buy | market | 1,500 | 1,500 | 10,500 | | \$19.79 | \$19.38 | \$20.09 |
| 29 | BROKERAGE FIRM 3 | ****1113 | WINNER | 9:51:53 | 9:51:55 | | Buy | market | 1,500 | 1,500 | 12,000 | | \$20.06 | \$19.45 | \$20.10 |
| 30 | BROKERAGE FIRM 3 | ****1113 | WINNER | 9:52:06 | 9:52:08 | | Buy | market | 3,000 | 3,000 | 15,000 | | \$20.10 | \$19.53 | \$20.10 |
| 31 | BROKERAGE FIRM 3 | ****1113 | WINNER | 9:52:14 | 9:52:16 | | Buy | market | 1,000 | 1,000 | 16,000 | | \$20.10 | \$19.53 | \$20.10 |
| 32 | BROKERAGE FIRM 3 | ****1113 | WINNER | 9:52:18 | 9:52:20 | | Buy | market | 1,000 | 1,000 | 17,000 | | \$20.13 | \$19.60 | \$20.10 |
| 33 | BROKERAGE FIRM 2 | ****3808 | HELPER [SHMALO] | 9:52:24 | | 9:52:36 | Buy | limit | 1,500 | | | \$20.10 | | \$19.76 | \$20.40 |
| 34 | BROKERAGE FIRM 2 | ****3808 | HELPER [SHMALO] | 9:52:31 | 9:52:31 | 9:52:42 | Buy | limit* | 1,500 | 200 | (1,400) | \$20.44 | \$20.44 | \$20.11 | \$20.62 |
| 35 | BROKERAGE FIRM 2 | ****3808 | HELPER [SHMALO] | 9:52:34 | | 9:52:43 | Buy | limit | 100 | | | \$20.49 | | \$20.46 | \$20.82 |
| 36 | BROKERAGE FIRM 2 | ****3808 | HELPER [SHMALO] | 9:52:36 | | 9:52:44 | Buy | limit | 100 | | | \$20.52 | | \$20.49 | \$20.82 |
| 37 | BROKERAGE FIRM 2 | ****3808 | HELPER [SHMALO] | 9:52:39 | | 9:53:03 | Buy | limit | 1,500 | | | \$20.57 | | \$20.52 | \$20.82 |
| 38 | BROKERAGE FIRM 2 | ****3808 | HELPER [SHMALO] | 9:52:40 | | 9:53:03 | Buy | limit | 100 | | | \$20.60 | | \$20.57 | \$21.05 |
| 39 | BROKERAGE FIRM 2 | ****3808 | HELPER [SHMALO] | 9:52:42 | | 9:53:03 | Buy | limit | 100 | | | \$20.63 | | \$20.60 | \$21.03 |
| 40 | BROKERAGE FIRM 2 | ****3808 | HELPER [SHMALO] | 9:52:44 | | 9:53:03 | Buy | limit | 100 | | | \$20.66 | | \$20.63 | \$21.03 |
| 41 | BROKERAGE FIRM 2 | ****3808 | HELPER [SHMALO] | 9:52:47 | | 9:53:04 | Buy | limit | 100 | | | \$20.81 | | \$20.66 | \$21.05 |
| 42 | BROKERAGE FIRM 2 | ****3808 | HELPER [SHMALO] | 9:52:51 | 9:52:51 | 9:53:04 | Buy | limit* | 100 | 45 | (1,355) | \$20.84 | \$20.84 | \$20.81 | \$21.05 |
| 43 | BROKERAGE FIRM 2 | ****3808 | HELPER [SHMALO] | 9:52:53 | | 9:53:05 | Buy | limit | 100 | | | \$20.84 | | \$20.81 | \$21.05 |
| 44 | BROKERAGE FIRM 2 | ****3808 | HELPER [SHMALO] | 9:52:55 | | 9:53:05 | Buy | limit | 100 | | | \$20.87 | | \$20.84 | \$21.05 |
| 45 | BROKERAGE FIRM 2 | ****3808 | HELPER [SHMALO] | 9:52:56 | | 9:53:05 | Buy | limit | 100 | | | \$20.90 | | \$20.87 | \$21.05 |
| 46 | BROKERAGE FIRM 2 | ****3808 | HELPER [SHMALO] | 9:52:59 | 9:52:59 | | Buy | limit | 100 | 100 | (1,255) | \$21.05 | \$21.02 | \$20.90 | \$21.05 |
| 47 | BROKERAGE FIRM 2 | ****3808 | HELPER [SHMALO] | 9:52:59 | 9:52:59 | | Buy | limit | 100 | 100 | (1,155) | \$21.05 | \$21.04 | \$20.90 | \$21.05 |
| 48 | BROKERAGE FIRM 2 | ****3808 | HELPER [SHMALO] | 9:53:00 | 9:53:00 | | Buy | limit | 100 | 100 | (1,055) | \$21.05 | \$21.05 | \$20.90 | \$21.05 |
| 49 | BROKERAGE FIRM 2 | ****3808 | HELPER [SHMALO] | 9:53:00 | | 9:53:18 | Buy | limit | 100 | | | \$20.93 | | \$20.90 | \$21.05 |
| 50 | BROKERAGE FIRM 2 | ****3808 | HELPER [SHMALO] | 9:53:01 | | 9:53:18 | Buy | limit | 100 | | | \$20.96 | | \$20.93 | \$21.38 |

Company C September 25, 2015
9:50 AM - 9:54 AM

| ID | Source | Account | Role | Order Time | Execution Time | Cancel Time | Buy/ Sell | Order Type | Order Quantity | Execution Quantity | Share Balance | Order Price | Execution Price | Best Bid | Best Ask | |
|----|------------------|----------|-----------------|------------|----------------|-------------|-----------|------------|----------------|--------------------|---------------|-------------|-----------------|----------|----------|---------|
| 51 | BROKERAGE FIRM 2 | ****3808 | HELPER [SHMALO] | 9:53:05 | | 9:53:18 | Buy | limit | 100 | | | \$20.99 | | \$20.96 | \$21.44 | |
| 52 | BROKERAGE FIRM 2 | ****3808 | HELPER [SHMALO] | 9:53:06 | | 9:53:18 | Buy | limit | 100 | | | \$21.02 | | \$20.99 | \$21.44 | |
| 53 | BROKERAGE FIRM 2 | ****3808 | HELPER [SHMALO] | 9:53:08 | | 9:53:19 | Buy | limit | 100 | | | \$21.12 | | \$21.02 | \$21.46 | |
| 54 | BROKERAGE FIRM 2 | ****3808 | HELPER [SHMALO] | 9:53:10 | | 9:53:33 | Buy | limit | 1,000 | | | \$21.09 | | \$21.12 | \$21.53 | |
| 55 | BROKERAGE FIRM 2 | ****3808 | HELPER [SHMALO] | 9:53:11 | | 9:53:33 | Buy | limit | 100 | | | \$21.15 | | \$21.12 | \$21.61 | |
| 56 | BROKERAGE FIRM 2 | ****3808 | HELPER [SHMALO] | 9:53:13 | | 9:53:33 | Buy | limit | 100 | | | \$21.24 | | \$21.15 | \$21.61 | |
| 57 | BROKERAGE FIRM 2 | ****3808 | HELPER [SHMALO] | 9:53:14 | | 9:53:33 | Buy | limit | 100 | | | \$21.27 | | \$21.24 | \$21.63 | |
| 58 | BROKERAGE FIRM 2 | ****3808 | HELPER [SHMALO] | 9:53:16 | | 9:53:33 | Buy | limit | 100 | | | \$21.29 | | \$21.27 | \$21.63 | |
| 59 | BROKERAGE FIRM 2 | ****3808 | HELPER [SHMALO] | 9:53:21 | | 9:53:34 | Buy | limit | 100 | | | \$21.30 | | \$21.29 | \$21.63 | |
| 60 | BROKERAGE FIRM 2 | ****3808 | HELPER [SHMALO] | 9:53:22 | 9:53:43 | | Buy | limit | 100 | 100 | (955) | \$21.33 | \$21.33 | \$21.30 | \$21.63 | |
| 61 | BROKERAGE FIRM 2 | ****3808 | HELPER [SHMALO] | 9:53:25 | 9:53:28 | | Buy | limit | 100 | 100 | (855) | \$21.36 | \$21.36 | \$21.33 | \$21.64 | |
| 62 | BROKERAGE FIRM 2 | ****3808 | HELPER [SHMALO] | 9:53:28 | 9:53:28 | | Buy | limit | 100 | 100 | (755) | \$21.42 | \$21.42 | \$21.36 | \$21.64 | |
| 63 | BROKERAGE FIRM 2 | ****3808 | HELPER [SHMALO] | 9:53:30 | 9:53:47 | | Buy | limit | 1,000 | 1,000 | 245 | \$21.32 | \$21.32 | \$21.33 | \$21.64 | |
| 64 | BROKERAGE FIRM 2 | ****3808 | HELPER [SHMALO] | 9:53:32 | 9:53:41 | | Buy | limit | 100 | 100 | 345 | \$21.36 | \$21.36 | \$21.33 | \$21.64 | |
| 65 | BROKERAGE FIRM 3 | ****1113 | WINNER | 9:53:40 | 9:53:42 | | Sell | market | 2,500 | 2,500 | 14,500 | | | \$21.40 | \$21.36 | \$21.64 |
| 66 | BROKERAGE FIRM 3 | ****1113 | WINNER | 9:53:43 | 9:53:46 | | Sell | market | 2,500 | 2,500 | 12,000 | | | \$21.57 | \$21.33 | \$21.74 |
| 67 | BROKERAGE FIRM 3 | ****1113 | WINNER | 9:53:46 | 9:53:47 | | Sell | market | 2,500 | 2,500 | 9,500 | | | \$21.36 | \$21.32 | \$21.74 |
| 68 | BROKERAGE FIRM 3 | ****1113 | WINNER | 9:53:49 | 9:53:50 | | Sell | market | 2,500 | 2,500 | 7,000 | | | \$21.20 | \$21.14 | \$21.71 |
| 69 | BROKERAGE FIRM 3 | ****1113 | WINNER | 9:53:52 | 9:53:53 | | Sell | market | 2,500 | 2,500 | 4,500 | | | \$21.04 | \$20.98 | \$21.58 |
| 70 | BROKERAGE FIRM 2 | ****3808 | HELPER [SHMALO] | 9:53:53 | 9:54:16 | | Buy | limit | 100 | 100 | 445 | \$20.86 | \$20.86 | \$20.82 | \$21.58 | |
| 71 | BROKERAGE FIRM 2 | ****3808 | HELPER [SHMALO] | 9:53:55 | 9:54:09 | | Buy | limit | 100 | 100 | 545 | \$21.01 | \$21.01 | \$20.98 | \$21.57 | |
| 72 | BROKERAGE FIRM 2 | ****3808 | HELPER [SHMALO] | 9:53:58 | 9:54:04 | | Buy | limit | 100 | 100 | 645 | \$21.08 | \$21.08 | \$21.01 | \$21.49 | |
| 73 | BROKERAGE FIRM 2 | ****3808 | HELPER [SHMALO] | 9:54:01 | 9:54:03 | | Buy | limit | 100 | 100 | 745 | \$21.14 | \$21.14 | \$21.08 | \$21.47 | |
| 74 | BROKERAGE FIRM 2 | ****3808 | HELPER [SHMALO] | 9:54:02 | 9:54:03 | | Buy | limit | 100 | 100 | 845 | \$21.17 | \$21.17 | \$21.14 | \$21.45 | |
| 75 | BROKERAGE FIRM 2 | ****3808 | HELPER [SHMALO] | 9:54:04 | 9:54:04 | | Buy | limit | 100 | 100 | 945 | \$21.29 | \$21.29 | \$21.17 | \$21.45 | |
| 76 | BROKERAGE FIRM 2 | ****3808 | HELPER [SHMALO] | 9:54:06 | 9:54:09 | | Buy | limit | 100 | 100 | 1,045 | \$21.08 | \$21.08 | \$21.01 | \$21.45 | |
| 77 | BROKERAGE FIRM 3 | ****1113 | WINNER | 9:54:09 | 9:54:11 | | Sell | market | 2,500 | 2,500 | 2,000 | | | \$20.96 | \$21.08 | \$21.45 |
| 78 | BROKERAGE FIRM 3 | ****1113 | WINNER | 9:54:16 | 9:54:18 | | Sell | market | 2,000 | 2,000 | 0 | | | \$20.89 | \$20.87 | \$21.45 |
| 79 | BROKERAGE FIRM 2 | ****3808 | HELPER [SHMALO] | 9:54:24 | 9:54:24 | | Sell | limit | 100 | 100 | 945 | \$20.58 | \$20.58 | \$20.58 | \$21.39 | |
| 80 | BROKERAGE FIRM 2 | ****3808 | HELPER [SHMALO] | 9:54:24 | | 9:54:24 | Sell | limit | 100 | 100 | | \$20.58 | | \$20.58 | \$21.39 | |
| 81 | BROKERAGE FIRM 2 | ****3808 | HELPER [SHMALO] | 9:54:25 | 9:54:25 | | Sell | limit | 100 | 100 | 845 | \$20.41 | \$20.71 | \$20.41 | \$21.39 | |
| 82 | BROKERAGE FIRM 2 | ****3808 | HELPER [SHMALO] | 9:54:25 | 9:54:25 | | Sell | limit | 100 | 100 | 745 | \$20.41 | \$20.68 | \$20.41 | \$21.39 | |
| 83 | BROKERAGE FIRM 2 | ****3808 | HELPER [SHMALO] | 9:54:25 | 9:54:25 | | Sell | limit | 100 | 100 | 645 | \$20.41 | \$20.68 | \$20.41 | \$21.39 | |
| 84 | BROKERAGE FIRM 2 | ****3808 | HELPER [SHMALO] | 9:54:25 | 9:54:25 | | Sell | limit | 100 | 100 | 545 | \$20.41 | \$20.41 | \$20.41 | \$21.39 | |
| 85 | BROKERAGE FIRM 2 | ****3808 | HELPER [SHMALO] | 9:54:25 | 9:54:25 | | Sell | limit | 100 | 100 | 445 | \$20.41 | \$20.68 | \$20.41 | \$21.39 | |
| 86 | BROKERAGE FIRM 2 | ****3808 | HELPER [SHMALO] | 9:54:25 | 9:54:25 | 9:54:25 | Sell | limit* | 100 | 10 | 435 | \$20.41 | \$20.41 | \$20.41 | \$21.39 | |
| 87 | BROKERAGE FIRM 2 | ****3808 | HELPER [SHMALO] | 9:54:26 | 9:54:26 | | Sell | limit | 100 | 100 | 335 | \$20.13 | \$20.13 | \$20.13 | \$21.28 | |
| 88 | BROKERAGE FIRM 2 | ****3808 | HELPER [SHMALO] | 9:54:26 | 9:54:26 | | Sell | limit | 100 | 100 | 235 | \$20.13 | \$20.26 | \$20.13 | \$21.28 | |
| 89 | BROKERAGE FIRM 2 | ****3808 | HELPER [SHMALO] | 9:54:26 | | 9:54:26 | Sell | limit | 100 | 100 | | \$20.13 | | \$20.13 | \$21.28 | |
| 90 | BROKERAGE FIRM 2 | ****3808 | HELPER [SHMALO] | 9:54:26 | 9:54:26 | | Sell | limit | 100 | 100 | 135 | \$20.13 | \$20.26 | \$20.13 | \$21.28 | |
| 91 | BROKERAGE FIRM 2 | ****3808 | HELPER [SHMALO] | 9:54:26 | 9:54:26 | | Sell | limit | 100 | 100 | 35 | \$20.13 | \$20.26 | \$20.13 | \$21.28 | |
| 92 | BROKERAGE FIRM 2 | ****3808 | HELPER [SHMALO] | 9:54:26 | 9:54:26 | | Sell | limit | 35 | 35 | 0 | \$20.12 | \$20.12 | \$20.13 | \$21.28 | |

Notes: If an order was filled through multiple transactions, then the execution time is the time of the last transaction. Highlighted rows indicate winner account activity. The best ask and best bid are as of the order time. *Indicates that an order was partially executed.

| Source | Account | Role | Shares | Dollars Invested | Profit Realized |
|------------------|----------|-----------------|--------|------------------|-----------------|
| BROKERAGE FIRM 3 | ****1113 | WINNER | 17,000 | \$336,081 | \$24,501 |
| BROKERAGE FIRM 2 | ****3808 | HELPER [SHMALO] | 2,645 | \$55,966 | -\$3,339 |
| TOTAL | | | 19,645 | \$392,047 | \$21,162 |

EXHIBIT 4

COORDINATED TRADING EVENT IN THE COMMON STOCK OF COMPANY D

FEBRUARY 16, 2016 FROM 10:10:26 AM TO 10:12:29 AM (Eastern Standard Time)

- A. On February 16, 2016 Defendants orchestrated a Coordinated Trading Event in Company D's stock, which traded on the NASDAQ exchange, from roughly 10:10:26 AM to 10:12:29 AM.
- B. For this particular Coordinated Trading Event, two of the Coordinated Accounts traded Company D stock. Defendant Greenwald was an authorized trader on the winner account (number ****1678), held in his name at Brokerage Firm 4 (hereinafter referred to in Exhibit 4 as the "winner" account). Associate A was an authorized trader on the helper account (number ****0140), held in the name of Associate A at Brokerage Firm 2 (hereinafter referred to in Exhibits 4, 5 and 6 as the "Associate A helper" account). Taub was not an authorized trader for either the winner or helper account, but traded in both accounts.
- C. Between approximately 10:10:26 AM and 10:11:01 AM, the Associate A helper account placed a series of ten sell limit orders in Company D stock (totaling 2,800 shares), all but three of which were at a progressively lower price (from \$57.42 to \$56.92). Six of the sell limit orders, for a total of 600 shares, were executed. The Associate A helper account cancelled four of the sell orders (totaling 2,200 shares). Between the time the first Associate A helper account sell order was placed and the winner account placed its first buy, the national best ask for Company D stock (that is, the lowest price at which market participants were offering to sell Company D stock) declined from \$57.43 per share to \$57.05 per share.
- D. At approximately 10:11:04 AM, the winner account began accumulating its position in Company D's stock by purchasing 3,000 shares at a price of \$57.10 per share. The Associate A helper account meanwhile continued to place sell limit orders in Company D stock. Specifically, the Associate A helper account placed two sell limit orders for 100 shares each, one of which was executed at approximately 10:11:34 AM and one of which was cancelled at approximately 10:11:35 AM. At 10:11:34 AM, the winner account purchased another 3,000 shares in Company D's stock at a price of \$57.18 per share.
- E. The Associate A helper account sell orders, both before and during the winner account's accumulation, were designed to, and did, artificially lower the stock's market price before (and while) the winner account accumulated its 6,000 share position.
- F. After the winner account accumulated its 6,000 share position, the scheme reversed course to enable the winner account to liquidate at an artificially high price using a rapid series of helper account buy limit orders to attempt to walk up the market price. Between approximately 10:11:40 AM and 10:12:08 AM, the Associate A helper account entered a series of 19 buy limit orders (totaling 2,700 shares), each generally at the same or progressively higher prices. Six of these buy limit orders (totaling 600 shares) were executed, at prices ranging from \$57.20 to \$57.76 per share. (The Associate A helper account cancelled the other thirteen buy limit orders before or within a second of the time the

winner account began executing sell orders.) Between the time the first Associate A helper account buy order was placed and the winner account placed its first sell order, the national best bid for Company D stock (that is, the highest price at which market participants were offering to buy Company D stock), moved from \$56.93 to \$57.54.

- G. From approximately 10:12:12 AM to 10:12:29 AM, the winner account quickly sold off its 6,000 share position in Company D at a profit. The winner account placed two sell market orders of 3,000 shares each, which were executed at \$57.60 per share and \$57.58 per share respectively. During approximately the same time period that the winner account was liquidating its position, the Associate A helper account entered an additional buy limit order for 100 shares, executed at approximately 10:12:29 for \$57.53 per share.
- H. The Associate A helper account buy limit orders both before and during the winner account's liquidation of the position were designed to, and did, artificially raise the stock's market price before and during the winner account's liquidation of its 6,000 share position.
- I. The net profit from this Coordinated Trading Event, which lasted approximately two minutes, was approximately \$2,391 and the trading constituted approximately 61% of the trading volume in Company D stock during that time period.
- J. On the same day, Defendants engaged in numerous other Coordinated Trading Events involving other companies' stock. Thus, on February 16, 2016, Defendants engaged in a total of at least 28 Coordinated Trading Events, netting profits of roughly \$44,056.

Company D February 16, 2016
10:10 AM - 10:12 AM

| ID | Source | Account | Account Name | Order Time | Execution Time | Cancel Time | Buy/Sell | Order Type | Order Quantity | Execution Quantity | Share Balance | Order Price | Execution Price | Best Bid | Best Ask |
|----|------------------|----------|----------------------|------------|----------------|-------------|----------|------------|----------------|--------------------|---------------|-------------|-----------------|----------|----------|
| 1 | BROKERAGE FIRM 2 | ****0140 | HELPER [ASSOCIATE A] | 10:10:26 | | 10:10:51 | Sell | limit | 100 | | | \$57.42 | | \$57.01 | \$57.43 |
| 2 | BROKERAGE FIRM 2 | ****0140 | HELPER [ASSOCIATE A] | 10:10:49 | | 10:10:51 | Sell | limit | 100 | | | \$57.30 | | \$57.02 | \$57.39 |
| 3 | BROKERAGE FIRM 2 | ****0140 | HELPER [ASSOCIATE A] | 10:10:52 | | 10:10:53 | Sell | limit | 1,000 | | | \$57.29 | | \$57.00 | \$57.29 |
| 4 | BROKERAGE FIRM 2 | ****0140 | HELPER [ASSOCIATE A] | 10:10:53 | 10:11:05 | | Sell | limit | 100 | 100 | (100) | \$57.27 | \$57.27 | \$57.00 | \$57.29 |
| 5 | BROKERAGE FIRM 2 | ****0140 | HELPER [ASSOCIATE A] | 10:10:56 | | 10:10:56 | Sell | limit | 1,000 | | | \$57.20 | | \$57.00 | \$57.27 |
| 6 | BROKERAGE FIRM 2 | ****0140 | HELPER [ASSOCIATE A] | 10:10:56 | 10:10:56 | | Sell | limit | 100 | 100 | (200) | \$57.00 | \$57.00 | \$57.00 | \$57.27 |
| 7 | BROKERAGE FIRM 2 | ****0140 | HELPER [ASSOCIATE A] | 10:10:58 | 10:10:58 | | Sell | limit | 100 | 100 | (300) | \$57.08 | \$57.08 | \$56.82 | \$57.19 |
| 8 | BROKERAGE FIRM 2 | ****0140 | HELPER [ASSOCIATE A] | 10:10:59 | 10:11:00 | | Sell | limit | 100 | 100 | (400) | \$57.10 | \$57.10 | \$56.92 | \$57.10 |
| 9 | BROKERAGE FIRM 2 | ****0140 | HELPER [ASSOCIATE A] | 10:11:00 | 10:11:00 | | Sell | limit | 100 | 100 | (500) | \$56.92 | \$56.92 | \$56.92 | \$57.10 |
| 10 | BROKERAGE FIRM 2 | ****0140 | HELPER [ASSOCIATE A] | 10:11:01 | 10:11:05 | | Sell | limit | 100 | 100 | (600) | \$57.05 | \$57.05 | \$56.92 | \$57.10 |
| 11 | BROKERAGE FIRM 4 | ****1678 | WINNER | 10:11:04 | 10:11:05 | | Buy | market | | 3,000 | 3,000 | | \$57.10 | \$56.81 | \$57.05 |
| 12 | BROKERAGE FIRM 2 | ****0140 | HELPER [ASSOCIATE A] | 10:11:08 | | 10:11:35 | Sell | limit | 100 | | | \$57.35 | | \$57.13 | \$57.38 |
| 13 | BROKERAGE FIRM 2 | ****0140 | HELPER [ASSOCIATE A] | 10:11:30 | 10:11:34 | | Sell | limit | 100 | 100 | (700) | \$57.21 | \$57.21 | \$56.93 | \$57.33 |
| 14 | BROKERAGE FIRM 4 | ****1678 | WINNER | 10:11:34 | 10:11:34 | | Buy | market | | 3,000 | 6,000 | | \$57.18 | \$56.93 | \$57.21 |
| 15 | BROKERAGE FIRM 2 | ****0140 | HELPER [ASSOCIATE A] | 10:11:40 | | 10:12:13 | Buy | limit | 700 | | | \$57.05 | | \$56.93 | \$57.20 |
| 16 | BROKERAGE FIRM 2 | ****0140 | HELPER [ASSOCIATE A] | 10:11:43 | | 10:12:13 | Buy | limit | 200 | | | \$57.11 | | \$57.05 | \$57.20 |
| 17 | BROKERAGE FIRM 2 | ****0140 | HELPER [ASSOCIATE A] | 10:11:43 | | 10:12:13 | Buy | limit | 100 | | | \$57.11 | | \$57.05 | \$57.20 |
| 18 | BROKERAGE FIRM 2 | ****0140 | HELPER [ASSOCIATE A] | 10:11:44 | 10:11:44 | | Buy | limit | 100 | 100 | (800) | \$57.20 | \$57.20 | \$57.11 | \$57.20 |
| 19 | BROKERAGE FIRM 2 | ****0140 | HELPER [ASSOCIATE A] | 10:11:44 | | 10:11:46 | Buy | limit | 100 | | | \$57.20 | | \$57.11 | \$57.20 |
| 20 | BROKERAGE FIRM 2 | ****0140 | HELPER [ASSOCIATE A] | 10:11:45 | | 10:12:13 | Buy | limit | 100 | | | \$57.23 | | \$57.20 | \$57.33 |
| 21 | BROKERAGE FIRM 2 | ****0140 | HELPER [ASSOCIATE A] | 10:11:46 | | 10:12:13 | Buy | limit | 100 | | | \$57.24 | | \$57.24 | \$57.44 |
| 22 | BROKERAGE FIRM 2 | ****0140 | HELPER [ASSOCIATE A] | 10:12:00 | | 10:12:13 | Buy | limit | 200 | | | \$57.35 | | \$57.24 | \$57.52 |
| 23 | BROKERAGE FIRM 2 | ****0140 | HELPER [ASSOCIATE A] | 10:12:02 | | 10:12:13 | Buy | limit | 100 | | | \$57.35 | | \$57.35 | \$57.52 |
| 24 | BROKERAGE FIRM 2 | ****0140 | HELPER [ASSOCIATE A] | 10:12:02 | 10:12:02 | | Buy | limit | 100 | 100 | (500) | \$57.52 | \$57.52 | \$57.35 | \$57.52 |
| 25 | BROKERAGE FIRM 2 | ****0140 | HELPER [ASSOCIATE A] | 10:12:02 | 10:12:03 | | Buy | limit | 100 | 100 | (400) | \$57.52 | \$57.51 | \$57.35 | \$57.52 |
| 26 | BROKERAGE FIRM 2 | ****0140 | HELPER [ASSOCIATE A] | 10:12:04 | 10:12:04 | | Buy | limit | 100 | 100 | (300) | \$57.51 | \$57.51 | \$57.35 | \$57.51 |
| 27 | BROKERAGE FIRM 2 | ****0140 | HELPER [ASSOCIATE A] | 10:12:05 | | 10:12:13 | Buy | limit | 100 | | | \$57.39 | | \$57.35 | \$57.51 |
| 28 | BROKERAGE FIRM 2 | ****0140 | HELPER [ASSOCIATE A] | 10:12:05 | | 10:12:13 | Buy | limit | 100 | | | \$57.52 | | \$57.35 | \$57.51 |
| 29 | BROKERAGE FIRM 2 | ****0140 | HELPER [ASSOCIATE A] | 10:12:06 | | 10:12:13 | Buy | limit | 100 | | | \$57.54 | | \$57.52 | \$57.80 |
| 30 | BROKERAGE FIRM 2 | ****0140 | HELPER [ASSOCIATE A] | 10:12:06 | | 10:12:13 | Buy | limit | 100 | | | \$57.54 | | \$57.52 | \$57.80 |
| 31 | BROKERAGE FIRM 2 | ****0140 | HELPER [ASSOCIATE A] | 10:12:07 | 10:12:07 | | Buy | limit | 100 | 100 | (200) | \$57.80 | \$57.76 | \$57.54 | \$57.80 |
| 32 | BROKERAGE FIRM 2 | ****0140 | HELPER [ASSOCIATE A] | 10:12:08 | 10:12:08 | | Buy | limit | 100 | 100 | (100) | \$57.62 | \$57.62 | \$57.54 | \$57.80 |
| 33 | BROKERAGE FIRM 2 | ****0140 | HELPER [ASSOCIATE A] | 10:12:08 | | 10:12:13 | Buy | limit | 100 | | | \$57.54 | | \$57.54 | \$57.80 |
| 34 | BROKERAGE FIRM 4 | ****1678 | WINNER | 10:12:12 | 10:12:12 | | Sell | market | | 3,000 | 3,000 | | \$57.80 | \$57.54 | \$57.79 |
| 35 | BROKERAGE FIRM 2 | ****0140 | HELPER [ASSOCIATE A] | 10:12:26 | 10:12:29 | | Buy | limit | 100 | 100 | 0 | \$57.53 | \$57.53 | \$57.42 | \$57.78 |
| 36 | BROKERAGE FIRM 4 | ****1678 | WINNER | 10:12:28 | 10:12:29 | | Sell | market | | 3,000 | 0 | | \$57.58 | \$57.53 | \$57.78 |

Note: If an order was filled through multiple transactions, then the execution time is the time of the first transaction.
 *Indicates that an order was partially executed.

| Source | Account | Name | Shares | Dollars Invested | Profit Realized |
|------------------|----------|----------------------|--------|------------------|-----------------|
| BROKERAGE FIRM 4 | ****1678 | WINNER | 6,000 | \$342,842 | \$2,693 |
| BROKERAGE FIRM 2 | ****0140 | HELPER [ASSOCIATE A] | 700 | \$40,265 | -\$302 |
| TOTAL | | | 6,700 | \$383,107 | \$2,391 |

EXHIBIT 5

COORDINATED TRADING EVENT IN THE COMMON STOCK OF COMPANY E

APRIL 11, 2016 FROM 10:10:25 AM TO 10:12:31 AM (Eastern Standard Time)

- A. On April 11, 2016 Defendants orchestrated a Coordinated Trading Event in Company E's stock, which traded on the NYSE, from roughly 10:10:25 AM to 10:12:31 AM.
- B. For this particular Coordinated Trading Event, four of the Coordinated Accounts traded Company E stock. Associate D was an authorized trader on two winner accounts. The first account was account number ****7935 held at Brokerage Firm 5 in the name of a limited liability company that Associate D purportedly owned and controlled (hereinafter referred to in Exhibit 5 as the "Brokerage Firm 5 winner" account). The second account was account number ****2658 held at Brokerage Firm 1 in the name of Associate D (hereinafter referred to in Exhibit 5 as the "Brokerage Firm 1 winner" account). A third winner account (account number ****5544) was held at Brokerage Firm 4 in the name of Associate A. The helper account that traded Company E stock in this particular Coordinated Trading Event was the aforementioned Associate A helper account (number ****0140), held in the name of Associate A at Brokerage Firm 2. Taub was not an authorized trader for the helper account or any of the winner accounts, but traded in each of them.
- C. Between approximately 10:10:25 AM and 10:10:30 AM, the Associate A helper account placed a series of six sell limit orders in Company E stock (totaling 3,300 shares), all but one of which was at a progressively lower price (from \$35.50 to \$35.32). Five of the sell limit orders, for a total of 800 shares, were executed. The Associate A helper account cancelled one of the sell orders (for 2,500 shares) at approximately 10:11:07 AM, after two of the winner accounts purchased their position in Company E stock and approximately 20 seconds before a third winner account purchased its position. Between the time the first Associate A helper account sell order was placed and the first winner account placed its first buy, the national best ask for Company E stock (that is, the lowest price at which market participants were offering to sell Company E stock) declined from \$35.50 per share to \$35.39 per share.
- D. At approximately 10:10:41 AM, the Brokerage Firm 5 winner account accumulated its position in Company E's stock by purchasing 2,000 shares at a price of \$35.37 per share. The Associate A helper account meanwhile continued to place sell limit orders in Company E stock, while the Brokerage Firm 4 winner account and Brokerage Firm 1 winner account accumulated their positions. Specifically, the Associate A helper account placed three sell limit orders for 100 shares each, two of which were executed at approximately 10:11:13 AM (at a price of \$35.48) and 10:11:28 AM (at a price of \$35.50) respectively. The third sell limit order was cancelled at approximately 10:10:56 AM, approximately one second after the Brokerage Firm 4 winner account accumulated a 3,000 share position. The Brokerage Firm 1 winner account also accumulated a 3,000 share position, with its order executing at approximately 10:11:27 AM at a price of \$35.49 per share.

- E. The Associate A helper account sell orders, both before and during the winner accounts' accumulation, were designed to, and did, artificially lower the stock's market price before (and while) the winner accounts accumulated a combined 8,000 share position.
- F. After the three winner accounts accumulated their combined 8,000 share position, the scheme reversed course to enable the winner accounts to liquidate at an artificially high price using a rapid series of helper account buy limit orders to attempt to walk up the market price. Between approximately 10:11:38 AM and 10:11:55 AM, the Associate A helper account entered a series of 4 buy limit orders (totaling 1,200 shares), each of which were executed, at prices ranging from \$35.56 to \$35.60 per share. From the time the first Associate A helper account buy order was placed and as the first two winner accounts liquidated their positions, the national best bid for Company E stock (that is, the highest price at which market participants were offering to buy Company E stock) held at \$35.56.
- G. The Brokerage Firm 1 winner account was the first winner account to liquidate its position, selling off its 3,000 shares in Company E for a profit at approximately 10:11:58 AM. Approximately ten seconds later, the Brokerage Firm 5 winner account sold off its 2,000 share position for a profit, executing an order at approximately 10:12:08 AM for a price of \$35.59 per share. Next, at approximately 10:12:23 AM, the Associate A helper account placed one more buy limit order for 100 shares at a price of \$35.50. That order was executed at approximately 10:12:26 AM, which was the same time that the Brokerage Firm 4 winner account sold off its entire 3,000 share position for a profit. The Brokerage Firm 4 winner account sell order was executed at 10:12:26 at a price of \$35.53.
- H. The Associate A helper account buy limit orders before and during the winner accounts' liquidation of their positions were designed to, and did, artificially raise the stock's market price before and during the winner accounts' liquidation of their combined 8,000 share position.
- I. The net profit from this Coordinated Trading Event, which lasted approximately two minutes, was approximately \$901 and the trading constituted approximately 74% of the trading volume in Company E stock during that time period.
- J. On the same day Defendants engaged in numerous other Coordinated Trading Events involving other companies' stock. Thus, on April 11, 2016, Defendants engaged in a total of at least 47 Coordinated Trading Events, netting profits of roughly \$39,962.

Company E April 11, 2016
10:10 AM - 10:12 AM

| ID | Source | Account | Account Name | Order Time | Execution Time | Cancel Time | Buy/Sell | Order Type | Order Quantity | Execution Quantity | Share Balance | Order Price | Execution Price | Best Bid | Best Ask |
|----|------------------|----------|---------------------------|------------|----------------|-------------|----------|------------|----------------|--------------------|---------------|-------------|-----------------|----------|----------|
| 1 | BROKERAGE FIRM 2 | ****0140 | HELPER [ASSOCIATE A] | 10:10:25 | | 10:11:07 | Sell | limit | 2,500 | | | \$35.50 | | \$35.37 | \$35.50 |
| 2 | BROKERAGE FIRM 2 | ****0140 | HELPER [ASSOCIATE A] | 10:10:26 | 10:11:07 | | Sell | limit | 400 | 400 | (400) | \$35.44 | \$35.44 | \$35.37 | \$35.50 |
| 3 | BROKERAGE FIRM 2 | ****0140 | HELPER [ASSOCIATE A] | 10:10:27 | 10:11:07 | | Sell | limit | 100 | 100 | (600) | \$35.44 | \$35.44 | \$35.37 | \$35.44 |
| 4 | BROKERAGE FIRM 2 | ****0140 | HELPER [ASSOCIATE A] | 10:10:28 | 10:10:28 | | Sell | limit | 100 | 100 | (600) | \$35.37 | \$35.37 | \$35.37 | \$35.44 |
| 5 | BROKERAGE FIRM 2 | ****0140 | HELPER [ASSOCIATE A] | 10:10:29 | 10:10:29 | | Sell | limit | 100 | 100 | (700) | \$35.32 | \$35.32 | \$35.36 | \$35.44 |
| 6 | BROKERAGE FIRM 2 | ****0140 | HELPER [ASSOCIATE A] | 10:10:30 | 10:10:43 | | Sell | limit | 100 | 100 | (800) | \$35.40 | \$35.40 | \$35.30 | \$35.43 |
| 7 | BROKERAGE FIRM 5 | ****7935 | WINNER [BROKERAGE FIRM 5] | 10:10:41 | 10:10:41 | | Buy | market | | 2,000 | 2,000 | | \$35.37 | \$35.31 | \$35.39 |
| 8 | BROKERAGE FIRM 2 | ****0140 | HELPER [ASSOCIATE A] | 10:10:53 | | 10:10:56 | Sell | limit | 100 | | | \$35.40 | | \$35.32 | \$35.43 |
| 9 | BROKERAGE FIRM 4 | ****5544 | WINNER [BROKERAGE FIRM 4] | 10:10:55 | 10:10:55 | | Buy | market | | 3,000 | 3,000 | | \$35.38 | \$35.33 | \$35.40 |
| 10 | BROKERAGE FIRM 2 | ****0140 | HELPER [ASSOCIATE A] | 10:11:09 | 10:11:13 | | Sell | limit | 100 | 100 | (900) | \$35.48 | \$35.48 | \$35.39 | \$35.49 |
| 11 | BROKERAGE FIRM 2 | ****0140 | HELPER [ASSOCIATE A] | 10:11:24 | 10:11:28 | | Sell | limit | 100 | 100 | (1,000) | \$35.50 | \$35.50 | \$35.43 | \$35.55 |
| 12 | BROKERAGE FIRM 1 | ****2658 | WINNER [BROKERAGE FIRM 1] | 10:11:27 | 10:11:27 | | Buy | market | | 3,000 | 3,000 | | \$35.49 | \$35.43 | \$35.50 |
| 13 | BROKERAGE FIRM 2 | ****0140 | HELPER [ASSOCIATE A] | 10:11:38 | 10:11:40 | | Buy | limit | 500 | 500 | (500) | \$35.60 | \$35.60 | \$35.56 | \$35.67 |
| 14 | BROKERAGE FIRM 2 | ****0140 | HELPER [ASSOCIATE A] | 10:11:53 | 10:11:53 | | Buy | limit | 500 | 500 | 0 | \$35.60 | \$35.60 | \$35.56 | \$35.66 |
| 15 | BROKERAGE FIRM 2 | ****0140 | HELPER [ASSOCIATE A] | 10:11:54 | 10:11:57 | | Buy | limit | 100 | 100 | 100 | \$35.56 | \$35.56 | \$35.55 | \$35.65 |
| 16 | BROKERAGE FIRM 2 | ****0140 | HELPER [ASSOCIATE A] | 10:11:55 | 10:11:55 | | Buy | limit | 100 | 100 | 200 | \$35.59 | \$35.59 | \$35.56 | \$35.66 |
| 17 | BROKERAGE FIRM 1 | ****2658 | WINNER [BROKERAGE FIRM 1] | 10:11:56 | 10:11:58 | | Sell | market | | 3,000 | 0 | \$35.57 | \$35.56 | \$35.65 | |
| 18 | BROKERAGE FIRM 5 | ****7935 | WINNER [BROKERAGE FIRM 5] | 10:12:06 | 10:12:08 | | Sell | market | | 2,000 | 0 | \$35.59 | \$35.56 | \$35.65 | |
| 19 | BROKERAGE FIRM 2 | ****0140 | HELPER [ASSOCIATE A] | 10:12:23 | 10:12:26 | | Buy | limit | 100 | 100 | 300 | \$35.50 | \$35.50 | \$35.48 | \$35.56 |
| 20 | BROKERAGE FIRM 4 | ****5544 | WINNER [BROKERAGE FIRM 4] | 10:12:26 | 10:12:26 | | Sell | market | | 3,000 | 0 | \$35.53 | \$35.51 | \$35.58 | |
| 21 | BROKERAGE FIRM 2 | ****0140 | HELPER [ASSOCIATE A] | 10:12:31 | 10:12:31 | | Sell | limit | 300 | 300 | 0 | \$35.45 | \$35.45 | \$35.45 | \$35.52 |

Note: If an order was filled through multiple transactions, then the execution time is the time of the first transaction.
 *Indicates that an order was partially executed.

| Source | Account | Name | Shares | Dollars Invested | Profit Realized |
|------------------|----------|---------------------------|--------|------------------|-----------------|
| BROKERAGE FIRM 5 | ****7935 | WINNER [BROKERAGE FIRM 5] | 2,000 | \$70,748 | \$437 |
| BROKERAGE FIRM 4 | ****5544 | WINNER [BROKERAGE FIRM 4] | 3,000 | \$106,149 | \$432 |
| BROKERAGE FIRM 1 | ****2658 | WINNER [BROKERAGE FIRM 1] | 3,000 | \$106,479 | \$235 |
| BROKERAGE FIRM 2 | ****0140 | HELPER [ASSOCIATE A] | 1,300 | \$46,265 | -\$203 |
| TOTAL | | | 9,300 | \$329,641 | \$901 |

EXHIBIT 6

COORDINATED TRADING EVENT IN THE COMMON STOCK OF COMPANY F

July 18, 2016 FROM 10:21:07 AM TO 10:26:55AM (Eastern Standard Time)

- A. On July 18, 2016 Defendants orchestrated a Coordinated Trading Event in Company F's stock, which traded on the NASDAQ exchange, from roughly 10:21:07 AM to 10:26:55 AM.
- B. For this particular Coordinated Trading Event, three of the Coordinated Accounts traded Company F stock. Associate B was an authorized trader on a winner account (number ****8747) held at Brokerage Firm 3 in the name of a limited liability company that Associate B purportedly owned and controlled (hereinafter referred to in Exhibit 6 as the "Brokerage Firm 3 winner" account). Associate B was also an authorized trader on a winner account (number ****0153) held at Brokerage Firm 4 in the name of a limited liability company that Associate B purportedly owned and controlled (hereinafter referred to in Exhibit 6 as the "Brokerage Firm 4 winner" account). The other Coordinated Account that traded Company F stock in this particular Coordinated Trading Event was the aforementioned Associate A helper account (number ****0140), held in the name of Associate A at Brokerage Firm 2. Taub was not an authorized trader for the winner or helper accounts, but controlled trading in all three accounts.
- C. Between approximately 10:21:07 AM and 10:21:42 AM, the Associate A helper account placed a series of eight sell limit orders in Company F stock (totaling 800 shares), all but two of which were at a progressively lower price (from \$53.21 to \$52.89). Seven of the sell limit orders, for a total of 700 shares, were executed. The Associate A helper account cancelled one of the sell orders (totaling 100 shares). Between the time the first Associate A helper account sell order was placed and the winner account placed its first buy, the national best ask for Company F stock (that is, the lowest price at which market participants were offering to sell Company F stock) declined from \$53.29 per share to \$53.06 per share.
- D. At approximately 10:21:47AM, the Brokerage Firm 4 winner account began accumulating its position in Company F's stock by purchasing 4,000 shares at a price of \$53.05 per share. The Associate A helper account meanwhile continued to place sell limit orders in Company F stock. Specifically, the Associate A helper account placed three sell limit orders for 100 shares each, one of which was executed at approximately 10:22:02 AM at a price of \$53.19 per share. The other two sell limit orders were cancelled at the same time – approximately 10:22:24 AM – as a buy order for 3,600 shares was executed at a price of \$53.17 in the Brokerage Firm 3 winner account.
- E. The Associate A helper account sell orders, both before and during the two winner accounts' accumulation, were designed to, and did, artificially lower the stock's market price before (and while) the winner accounts accumulated a combined 7,600 share position.
- F. After the two winner accounts accumulated a combined 7,600 share position, the scheme reversed course to enable the winner accounts to liquidate at an artificially high price using a rapid series of helper account buy limit orders to attempt to walk up the market price.

Between approximately 10:22:30 AM and 10:23:40 AM, the Associate A helper account entered a series of 7 buy limit orders (totaling 1,600 shares), each generally at the same or progressively higher prices. Four of these buy limit orders were cancelled and the remaining three buy limit orders (totaling 300 shares) were executed, at prices ranging from \$53.44 to \$53.60 per share. Between the time the first Associate A helper account buy order was placed and the winner account placed its first sell order, the national best bid for Company F stock (that is, the highest price at which market participants were offering to buy Company F stock), moved from \$53.11 to \$53.44.

- G. At approximately 10:23:43 AM, the Brokerage Firm 4 winner account sold its 4,000 share position in Company F stock at a price of \$53.44 per share, resulting in a profit. The Associate A helper account then placed three more buy limit orders in advance of the Brokerage Firm 3 winner account selling off its 3,600 share position at a price of \$53.37 per share. Two of the Associate A helper account buy limit orders were executed and one was cancelled approximately two seconds after the Brokerage Firm 3 winner account sold its position.
- H. The Associate A helper account buy limit orders before and during the winner accounts' liquidation of their position were designed to, and did, artificially raise the stock's market price before and during the winner accounts' liquidation of their combined 7,600 share position.
- I. The net profit from this Coordinated Trading Event, which lasted less than six minutes, was approximately \$2,061 and the trading constituted approximately 67% of the trading volume in Company F stock during that time period.
- J. On the same day, Defendants engaged in at least 4 Coordinated Trading Events in Company F's stock (*i.e.*, the above event and 3 others), netting profits of roughly \$6,942. In addition on July 18, 2016 Defendants engaged in numerous other Coordinated Trading Events involving other companies' stock. Thus, on July 18, 2016, Defendants engaged in a total of at least 30 Coordinated Trading Events, netting profits of roughly \$49,800.

Company F July 18, 2016
10:21 AM - 10:26 AM

| ID | Source | Account | Account Name | Order Time | Execution Time | Cancel Time | Buy/Sell | Order Type | Order Quantity | Execution Quantity | Share Balance | Order Price | Execution Price | Best Bid | Best Ask |
|----|------------------|----------|---------------------------|------------|----------------|-------------|----------|------------|----------------|--------------------|---------------|-------------|-----------------|----------|----------|
| 1 | BROKERAGE FIRM 2 | ****0140 | HELPER [ASSOCIATE A] | 10:21:07 | 10:21:47 | | Sell | limit | 100 | 100 | (100) | \$53.21 | \$53.21 | \$53.08 | \$53.29 |
| 2 | BROKERAGE FIRM 2 | ****0140 | HELPER [ASSOCIATE A] | 10:21:37 | 10:21:37 | | Sell | limit | 100 | 100 | (200) | \$53.08 | \$53.07 | \$53.08 | \$53.21 |
| 3 | BROKERAGE FIRM 2 | ****0140 | HELPER [ASSOCIATE A] | 10:21:38 | 10:21:47 | | Sell | limit | 100 | 100 | (300) | \$53.15 | \$53.15 | \$53.08 | \$53.21 |
| 4 | BROKERAGE FIRM 2 | ****0140 | HELPER [ASSOCIATE A] | 10:21:38 | | 10:21:40 | Sell | limit | 100 | | | \$53.08 | | \$53.08 | \$53.21 |
| 5 | BROKERAGE FIRM 2 | ****0140 | HELPER [ASSOCIATE A] | 10:21:40 | 10:21:47 | | Sell | limit | 100 | 100 | (400) | \$53.08 | \$53.08 | \$52.89 | \$53.08 |
| 6 | BROKERAGE FIRM 2 | ****0140 | HELPER [ASSOCIATE A] | 10:21:40 | 10:21:40 | | Sell | limit | 100 | 100 | (500) | \$52.89 | \$52.92 | \$52.89 | \$53.08 |
| 7 | BROKERAGE FIRM 2 | ****0140 | HELPER [ASSOCIATE A] | 10:21:42 | 10:21:42 | | Sell | limit | 100 | 100 | (600) | \$52.99 | \$52.99 | \$52.89 | \$53.08 |
| 8 | BROKERAGE FIRM 2 | ****0140 | HELPER [ASSOCIATE A] | 10:21:42 | 10:21:42 | | Sell | limit | 100 | 100 | (700) | \$52.89 | \$52.96 | \$52.89 | \$53.08 |
| 9 | BROKERAGE FIRM 4 | ****0153 | WINNER [BROKERAGE FIRM 4] | 10:21:47 | 10:21:48 | | Buy | market | | 4,000 | 4,000 | | \$53.05 | \$52.90 | \$53.08 |
| 10 | BROKERAGE FIRM 2 | ****0140 | HELPER [ASSOCIATE A] | 10:22:02 | 10:22:02 | | Sell | limit | 100 | 100 | (800) | \$53.19 | \$53.19 | \$52.97 | \$53.51 |
| 11 | BROKERAGE FIRM 2 | ****0140 | HELPER [ASSOCIATE A] | 10:22:04 | | 10:22:24 | Sell | limit | 100 | | | \$53.29 | | \$53.02 | \$53.48 |
| 12 | BROKERAGE FIRM 2 | ****0140 | HELPER [ASSOCIATE A] | 10:22:17 | | 10:22:24 | Sell | limit | 100 | | | \$53.23 | | \$53.08 | \$53.29 |
| 13 | BROKERAGE FIRM 3 | ****8747 | WINNER | 10:22:23 | 10:22:24 | | Buy | market | | 3,600 | 3,600 | | \$53.17 | \$53.08 | \$53.23 |
| 14 | BROKERAGE FIRM 2 | ****0140 | HELPER [ASSOCIATE A] | 10:22:30 | | 10:22:40 | Buy | limit | 400 | | | \$53.11 | | \$53.11 | \$53.51 |
| 15 | BROKERAGE FIRM 2 | ****0140 | HELPER [ASSOCIATE A] | 10:22:40 | | 10:22:43 | Buy | limit | 100 | | | \$53.14 | | \$53.14 | \$53.51 |
| 16 | BROKERAGE FIRM 2 | ****0140 | HELPER [ASSOCIATE A] | 10:22:43 | | 10:23:26 | Buy | limit | 400 | | | \$53.16 | | \$53.16 | \$53.51 |
| 17 | BROKERAGE FIRM 2 | ****0140 | HELPER [ASSOCIATE A] | 10:23:26 | | 10:23:40 | Buy | limit | 400 | | | \$53.37 | | \$53.23 | \$53.56 |
| 18 | BROKERAGE FIRM 2 | ****0140 | HELPER [ASSOCIATE A] | 10:23:34 | 10:23:34 | | Buy | limit | 100 | 100 | (700) | \$53.60 | \$53.51 | \$53.38 | \$53.60 |
| 19 | BROKERAGE FIRM 2 | ****0140 | HELPER [ASSOCIATE A] | 10:23:34 | 10:23:34 | | Buy | limit | 100 | 100 | (800) | \$53.60 | \$53.60 | \$53.38 | \$53.60 |
| 20 | BROKERAGE FIRM 2 | ****0140 | HELPER [ASSOCIATE A] | 10:23:40 | 10:23:46 | | Buy | limit | 100 | 100 | (900) | \$53.44 | \$53.44 | \$53.39 | \$53.75 |
| 21 | BROKERAGE FIRM 4 | ****0153 | WINNER [BROKERAGE FIRM 4] | 10:23:43 | 10:23:46 | | Sell | market | | 4,000 | 0 | | \$53.44 | \$53.44 | \$53.76 |
| 22 | BROKERAGE FIRM 2 | ****0140 | HELPER [ASSOCIATE A] | 10:23:52 | | 10:24:14 | Buy | limit | 300 | | | \$53.20 | | \$52.95 | \$53.59 |
| 23 | BROKERAGE FIRM 2 | ****0140 | HELPER [ASSOCIATE A] | 10:24:02 | 10:24:02 | | Buy | limit | 200 | 200 | (300) | \$53.37 | \$53.37 | \$53.21 | \$53.60 |
| 24 | BROKERAGE FIRM 2 | ****0140 | HELPER [ASSOCIATE A] | 10:24:06 | 10:24:12 | | Buy | limit | 100 | 100 | (200) | \$53.34 | \$53.34 | \$53.21 | \$53.60 |
| 25 | BROKERAGE FIRM 3 | ****8747 | WINNER | 10:24:11 | 10:24:12 | | Sell | market | | 3,600 | 0 | | \$53.37 | \$53.34 | \$53.61 |
| 26 | BROKERAGE FIRM 2 | ****0140 | HELPER [ASSOCIATE A] | 10:24:15 | | 10:24:20 | Buy | limit | 200 | | | \$53.07 | | \$53.08 | \$53.55 |
| 27 | BROKERAGE FIRM 2 | ****0140 | HELPER [ASSOCIATE A] | 10:24:19 | 10:26:55 | | Buy | limit | 200 | 200 | 0 | \$53.08 | \$53.08 | \$53.08 | \$53.55 |

Note: If an order was filled through multiple transactions, then the execution time is the time of the first transaction.
 *Indicates that an order was partially executed.

| Source | Account | Name | Shares | Dollars Invested | Profit Realized |
|------------------|----------|---------------------------|--------|------------------|-----------------|
| BROKERAGE FIRM 3 | ****8747 | WINNER | 3,600 | \$191,412 | \$703 |
| BROKERAGE FIRM 4 | ****0153 | WINNER [BROKERAGE FIRM 4] | 4,000 | \$212,188 | \$1,582 |
| BROKERAGE FIRM 2 | ****0140 | HELPER [ASSOCIATE A] | 800 | \$42,679 | -\$224 |
| TOTAL | | | 8,400 | \$446,279 | \$2,061 |

EXHIBIT 7

COORDINATED TRADING EVENT IN THE COMMON STOCK OF COMPANY G

AUGUST 15, 2016 FROM 11:06:35 AM TO 11:07:36 AM (Eastern Standard Time)

- A. On August 15, 2016 Defendants orchestrated a Coordinated Trading Event in Company G's stock, which traded on the NYSE, from roughly 11:06:35 AM to 11:07:36 AM.
- B. For this particular Coordinated Trading Event, two of the Coordinated Accounts traded Company G stock. Associate E was an authorized trader on the winner account (number ****1498), held in her name at Brokerage Firm 4 (hereinafter referred to in Exhibit 7 as the "winner" account). Associate F's spouse was an authorized trader on the helper account (number ****0249), held in the name of Associate F's spouse at Brokerage Firm 2 (hereinafter referred to in Exhibit 7 as the "helper" account). Taub provided the login credentials for both the winner and helper account to Shmalo. Taub and Shmalo were not authorized traders for either the winner or helper account. Shmalo controlled trading in both accounts.
- C. Between approximately 11:06:35 AM and 11:06:55 AM, the helper account placed a series of eight sell limit orders in Company G stock (totaling 800 shares), all but one of which were at a progressively lower price (from \$73.52 to \$73.30). Three of the sell limit orders, for a total of 300 shares, were executed. The helper account cancelled five of the sell orders (totaling 500 shares). Between the time the first helper account sell order was placed and the winner account placed its first buy, the national best ask for Company G stock (that is, the lowest price at which market participants were offering to sell Company G stock) declined from \$73.56 per share to \$73.37 per share.
- D. The helper account sell orders before the winner account's accumulation, were designed to, and did, artificially lower the stock's market price before (and while) the winner account accumulated a 10,000 share position.
- E. At approximately 11:06:57 AM, the winner account began accumulating its position in Company G's stock through two market buy orders for 5,000 shares each, placed in quick succession. The first order was executed at 11:06:57 AM at a price of \$73.36 per share and the second order was executed at 11:06:59 AM at a price of \$73.46 per share.
- F. After the winner account accumulated its 10,000 share position, the scheme reversed course to enable the winner account to liquidate at an artificially high price using a rapid series of helper account buy limit orders to attempt to walk up the market price. Between approximately 11:07:05 AM and 11:07:32 AM, the helper account entered a series of 10 buy limit orders (totaling 1,200 shares), each generally at the same or progressively higher prices. Eight of these buy limit orders (totaling 1,000 shares) were executed, at prices ranging from \$73.67 to \$73.83 per share. (The helper account cancelled the other two buy limit orders after the winner account started liquidating its position and approximately three seconds before the winner account finished liquidating its position.) Between the time the first helper account buy order was placed and the winner account completed its liquidation, the national

best bid for Company G stock (that is, the highest price at which market participants were offering to buy Company G stock), moved from \$73.59 to \$73.67.

- G. From approximately 11:07:11 to 11:07:36 AM, the winner account quickly sold off its 10,000 share position in Company G at a profit. The winner account placed two sell market orders of 5,000 shares each, which were executed at \$73.63 per share and \$73.62 per share respectively.
- H. The helper account buy limit orders both before and during the winner account's liquidation of the position were designed to, and did, artificially raise the stock's market price before and during the winner account's liquidation of its 10,000 share position.
- I. The net profit from this Coordinated Trading Event, which lasted approximately one minute, was approximately \$1,913 and the trading constituted approximately 67% of the trading volume in Company G stock during that time period.
- J. On the same day, Defendants engaged in numerous other Coordinated Trading Events involving other companies' stock. Thus, on August 15, 2016, Defendants engaged in a total of at least 30 Coordinated Trading Events, netting profits of roughly \$42,740.

Company G August 15, 2016
11:06 AM - 11:07 AM

| ID | Source | Account | Account Name | Order Time | Execution Time | Cancel Time | Buy/Sell | Order Type | Order Quantity | Execution Quantity | Share Balance | Order Price | Execution Price | Best Bid | Best Ask |
|----|------------------|----------|--------------|------------|----------------|-------------|----------|------------|----------------|--------------------|---------------|-------------|-----------------|----------|----------|
| 1 | BROKERAGE FIRM 2 | ****0249 | HELPER | 11:06:35 | | 11:06:41 | Sell | limit | 100 | | | \$73.52 | | \$73.35 | \$73.56 |
| 2 | BROKERAGE FIRM 2 | ****0249 | HELPER | 11:06:37 | | 11:06:41 | Sell | limit | 100 | | | \$73.47 | | \$73.35 | \$73.52 |
| 3 | BROKERAGE FIRM 2 | ****0249 | HELPER | 11:06:38 | | 11:06:41 | Sell | limit | 100 | | | \$73.43 | | \$73.35 | \$73.47 |
| 4 | BROKERAGE FIRM 2 | ****0249 | HELPER | 11:06:41 | | 11:06:44 | Sell | limit | 100 | | | \$73.41 | | \$73.30 | \$73.43 |
| 5 | BROKERAGE FIRM 2 | ****0249 | HELPER | 11:06:46 | | 11:06:56 | Sell | limit | 100 | | | \$73.37 | | \$73.30 | \$73.41 |
| 6 | BROKERAGE FIRM 2 | ****0249 | HELPER | 11:06:51 | 11:06:51 | | Sell | limit | 100 | 100 | (100) | \$73.30 | \$73.32 | \$73.30 | \$73.37 |
| 7 | BROKERAGE FIRM 2 | ****0249 | HELPER | 11:06:53 | 11:06:53 | | Sell | limit | 100 | 100 | (200) | \$73.30 | \$73.31 | \$73.30 | \$73.37 |
| 8 | BROKERAGE FIRM 2 | ****0249 | HELPER | 11:06:55 | 11:06:55 | | Sell | limit | 100 | 100 | (300) | \$73.35 | \$73.35 | \$73.30 | \$73.37 |
| 9 | BROKERAGE FIRM 4 | ****1498 | WINNER | 11:06:57 | 11:06:57 | | Buy | market | | 5,000 | 5,000 | | \$73.36 | \$73.30 | \$73.37 |
| 10 | BROKERAGE FIRM 4 | ****1498 | WINNER | 11:06:59 | 11:06:59 | | Buy | market | | 5,000 | 10,000 | | \$73.46 | \$73.31 | \$73.46 |
| 11 | BROKERAGE FIRM 2 | ****0249 | HELPER | 11:07:05 | 11:07:05 | | Buy | limit | 300 | 300 | 0 | | \$73.67 | \$73.59 | \$73.66 |
| 12 | BROKERAGE FIRM 4 | ****1498 | WINNER | 11:07:11 | 11:07:11 | | Sell | market | | 5,000 | 5,000 | | \$73.63 | \$73.62 | \$73.71 |
| 13 | BROKERAGE FIRM 2 | ****0249 | HELPER | 11:07:23 | | 11:07:33 | Buy | limit | 100 | | | \$73.61 | | \$73.51 | \$73.71 |
| 14 | BROKERAGE FIRM 2 | ****0249 | HELPER | 11:07:24 | 11:07:24 | | Buy | limit | 100 | 100 | 100 | \$73.71 | \$73.71 | \$73.61 | \$73.71 |
| 15 | BROKERAGE FIRM 2 | ****0249 | HELPER | 11:07:25 | 11:07:25 | | Buy | limit | 100 | 100 | 200 | \$73.71 | \$73.71 | \$73.61 | \$73.71 |
| 16 | BROKERAGE FIRM 2 | ****0249 | HELPER | 11:07:26 | 11:07:26 | | Buy | limit | 100 | 100 | 300 | \$73.72 | \$73.72 | \$73.61 | \$73.72 |
| 17 | BROKERAGE FIRM 2 | ****0249 | HELPER | 11:07:27 | 11:07:27 | | Buy | limit | 100 | 100 | 400 | \$73.73 | \$73.73 | \$73.61 | \$73.73 |
| 18 | BROKERAGE FIRM 2 | ****0249 | HELPER | 11:07:28 | 11:07:28 | | Buy | limit | 100 | 100 | 500 | \$73.75 | \$73.75 | \$73.61 | \$73.75 |
| 19 | BROKERAGE FIRM 2 | ****0249 | HELPER | 11:07:29 | 11:07:29 | | Buy | limit | 100 | 100 | 600 | \$73.81 | \$73.81 | \$73.68 | \$73.77 |
| 20 | BROKERAGE FIRM 2 | ****0249 | HELPER | 11:07:31 | | 11:07:33 | Buy | limit | 100 | | | \$73.67 | | \$73.61 | \$73.84 |
| 21 | BROKERAGE FIRM 2 | ****0249 | HELPER | 11:07:32 | 11:07:32 | | Buy | limit | 100 | 100 | 700 | \$73.83 | \$73.83 | \$73.62 | \$73.84 |
| 22 | BROKERAGE FIRM 4 | ****1498 | WINNER | 11:07:36 | 11:07:36 | | Sell | market | | 5,000 | 0 | | \$73.62 | \$73.67 | \$73.81 |

Note: If an order was filled through multiple transactions, then the execution time is the time of the first transaction.
 *Indicates that an order was partially executed.

| <u>Source</u> | <u>Account</u> | <u>Name</u> | <u>Shares</u> | <u>Dollars Invested</u> | <u>Profit Realized</u> |
|------------------|----------------|-------------|---------------|-------------------------|------------------------|
| BROKERAGE FIRM 4 | ****1498 | WINNER | 10,000 | \$734,073 | \$2,149 |
| BROKERAGE FIRM 2 | ****0249 | HELPER | 1,000 | \$73,727 | -\$236 |
| TOTAL | | | 11,000 | \$807,800 | \$1,913 |